

2024

# Power Semiconductor



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| Series | Outline                                                                                                                              | Part No. | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM[A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------------------------------|----------|----------|--------|----------|---------|---------|---------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| MC     | nSMC_FL<br><br>8.0×4.0×1.5(mm)                      | MC03DA40 | 400      | 3.0    | 80.0     | 0.010   | 1.00    | 3.0     | -55 to 150                              |     |    |
|        |                                                                                                                                      | MC05DA20 | 200      | 5.0    | 130.0    | 0.010   | 0.99    | 5.0     | -55 to 150                              |     |                                                                                       |
| ME     | SOD-128<br><br>4.8×2.7×1.0(mm)                      | ME01DA40 | 400      | 1.0    | 25.0     | 0.010   | 1.05    | 1.0     | -55 to 150                              |     |                                                                                       |
| MP     | SOD-123FL<br><br>3.5×1.6×0.9(mm)                    | MPP5DA40 | 400      | 0.5    | 10.0     | 0.010   | 1.10    | 0.5     | -55 to 150                              |     |                                                                                       |
| Axial  | 3Max × φ2.7<br>(DO-41S)<br><br>3.0×φ2.7(mm)         | 10EDB40  | 400      | 1.0    | 45.0     | 0.010   | 1.00    | 1.0     | -55 to 150                              |     |                                                                                       |
|        |                                                                                                                                      | 10EDB60  | 600      | 1.0    | 45.0     | 0.010   | 1.00    | 1.0     | -55 to 150                              |     |                                                                                       |
|        | DO-204AC<br>(DO-15)<br><br>7.6×φ3.6(mm)             | 20CDA40  | 400      | 2.0    | 75.0     | 0.010   | 1.00    | 2.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                      | 20CDA60  | 600      | 2.0    | 75.0     | 0.010   | 1.00    | 2.0     | -40 to 150                              |     |                                                                                       |
|        | DO-201AD<br><br>9.2×φ5.8(mm)                        | 30GDA40  | 400      | 3.0    | 100.0    | 0.010   | 1.00    | 3.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                      | 30GDA60  | 600      | 3.0    | 100.0    | 0.010   | 1.00    | 3.0     | -40 to 150                              |     |                                                                                       |
| TF     | TO-220<br>Full-Mold 2pin<br><br>28.5×10.1×4.5(mm) | FSD20A90 | 900      | 20.0   | 200.0    | 0.050   | 1.25    | 20.0    | -40 to 150                              |     |  |

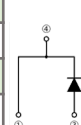
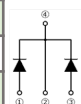
## For Automotive AEC-Q101 Qualified Products



| Series | Outline                                                                                                             | Part No.  | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM[A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|---------------------------------------------------------------------------------------------------------------------|-----------|----------|--------|----------|---------|---------|---------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| MC     | nSMC_FL<br><br>8.0×4.0×1.5(mm)   | AMC03DA40 | 400      | 3.0    | 80.0     | 0.010   | 1.00    | 3.0     | -55 to 150                              | ✓   |  |
|        |                                                                                                                     | AMC05DA20 | 200      | 5.0    | 130.0    | 0.010   | 0.99    | 5.0     | -55 to 150                              | ✓   |                                                                                       |
| ME     | SOD-128<br><br>4.8×2.7×1.0(mm)   | AME01DA40 | 400      | 1.0    | 25.0     | 0.010   | 1.05    | 1.0     | -55 to 150                              | ✓   |                                                                                       |
| MP     | SOD-123FL<br><br>3.5×1.6×0.9(mm) | AMPP5DA40 | 400      | 0.5    | 10.0     | 0.010   | 1.10    | 0.5     | -55 to 150                              | ✓   |                                                                                       |



| Series | Outline                                                                                                                      | Part No. | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit |
|--------|------------------------------------------------------------------------------------------------------------------------------|----------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------|
| MC     | nSMC_FL<br><br>8.0×4.0×1.5(mm)              | MC03FA20 | 200      | 3.0    | 45.0     | 0.010   | 0.98    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | MC03FA40 | 400      | 3.0    | 45.0     | 0.010   | 1.25    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | MC03FF60 | 600      | 3.0    | 45.0     | 0.010   | 1.70    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | MC03FH60 | 600      | 3.0    | 60.0     | 0.010   | 1.28    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | MC03UD60 | 600      | 3.0    | 35.0     | 0.010   | 2.30    | 3.0      | -55 to 150                              |     |         |
| ME     | SOD-128<br><br>4.8×2.7×1.0(mm)              | ME01FA20 | 200      | 1.0    | 20.0     | 0.010   | 0.98    | 1.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | ME01FA40 | 400      | 1.0    | 20.0     | 0.010   | 1.25    | 1.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | ME01FA60 | 600      | 1.0    | 20.0     | 0.010   | 1.39    | 1.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | ME03FA20 | 200      | 3.0    | 45.0     | 0.010   | 0.98    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | ME03FA40 | 400      | 3.0    | 45.0     | 0.010   | 1.25    | 3.0      | -55 to 150                              |     |         |
|        |                                                                                                                              | ME03FH60 | 600      | 3.0    | 60.0     | 0.010   | 1.28    | 3.0      | -55 to 150                              |     |         |
| MP     | SOD-123FL<br><br>3.5×1.6×0.9(mm)            | MPP4RA60 | 600      | 0.4    | 20.0     | 0.010   | 1.32    | 0.4      | -55 to 150                              |     |         |
|        |                                                                                                                              | MPP5FA20 | 200      | 0.5    | 20.0     | 0.010   | 0.95    | 0.5      | -55 to 150                              |     |         |
| Axial  | 3Max × φ2.7<br>(DO-41S)<br><br>3.0×φ2.7(mm) | 11EFS2   | 200      | 1.0    | 30.0     | 0.010   | 0.98    | 1.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | 11EFS4   | 400      | 1.0    | 30.0     | 0.020   | 1.25    | 1.0      | -40 to 150                              |     |         |
|        | DO-204AC<br>(DO-15)<br><br>7.6×φ3.6(mm)     | 20CFA40  | 400      | 2.0    | 50.0     | 0.010   | 1.28    | 2.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | 20CFF60  | 600      | 2.0    | 40.0     | 0.010   | 1.58    | 2.0      | -40 to 150                              |     |         |
|        | DO-201AD<br><br>9.2×φ5.8(mm)              | 30GFF60  | 600      | 3.0    | 45.0     | 0.010   | 1.70    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | 30GFA20  | 200      | 3.0    | 60.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | 30GFA40  | 400      | 3.0    | 60.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
| TG     | TO-220<br><br>28.4×10.1×4.6(mm)           | GCF06A20 | 200      | 6.0    | 60.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | GCF06A40 | 400      | 6.0    | 60.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | GCF06F60 | 600      | 6.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              |     |         |
|        |                                                                                                                              | GCF10A20 | 200      | 10.0   | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | GCF10A40 | 400      | 10.0   | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |         |
|        | TO-220 2pin<br><br>28.4×10.1×4.6(mm)      | GSF05A20 | 200      | 5.0    | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | GSF05A40 | 400      | 5.0    | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | GSF05F60 | 600      | 5.0    | 80.0     | 0.020   | 1.70    | 5.0      | -40 to 175                              |     |         |
| TF     | TO-220 Full-Mold<br><br>28.5×10.1×4.5(mm) | FCU10D40 | 400      | 10.0   | 80.0     | 0.030   | 1.53    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCU10D40 | 400      | 20.0   | 120.0    | 0.030   | 1.53    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF06A20 | 200      | 6.0    | 60.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF06A40 | 400      | 6.0    | 60.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF06F60 | 600      | 6.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              |     |         |
|        |                                                                                                                              | FCF10A20 | 200      | 10.0   | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF10A40 | 400      | 10.0   | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF10F60 | 600      | 10.0   | 80.0     | 0.020   | 1.70    | 5.0      | -55 to 175                              |     |         |
|        |                                                                                                                              | FCF10H60 | 600      | 10.0   | 80.0     | 0.020   | 1.35    | 5.0      | -40 to 175                              |     |         |
|        |                                                                                                                              | FCF16A20 | 200      | 16.0   | 120.0    | 0.025   | 0.98    | 8.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF16A40 | 400      | 16.0   | 120.0    | 0.030   | 1.25    | 8.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF20F60 | 600      | 20.0   | 120.0    | 0.030   | 1.80    | 10.0     | -55 to 175                              |     |         |
|        |                                                                                                                              | FCF20G60 | 600      | 20.0   | 120.0    | 0.030   | 1.50    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                              | FCF20H60 | 600      | 20.0   | 120.0    | 0.030   | 1.35    | 10.0     | -55 to 175                              |     |         |
|        |                                                                                                                              | FCU10A20 | 200      | 10.0   | 100.0    | 0.020   | 1.10    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                              | FCU10D60 | 600      | 10.0   | 60.0     | 0.010   | 2.30    | 5.0      | -55 to 175                              |     |         |
|        |                                                                                                                              | FCU20A20 | 200      | 20.0   | 120.0    | 0.025   | 1.13    | 10.0     | -40 to 150                              |     |         |





| Series | Outline                                                                                                                                 | Part No.  | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| TF     | TO-220<br>Full-Mold 2pin<br><br>28.5×10.1×4.5(mm)      | FSF05A20  | 200      | 5.0    | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |    |
|        |                                                                                                                                         | FSF10A20  | 200      | 10.0   | 120.0    | 0.025   | 1.03    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU05A20  | 200      | 5.0    | 100.0    | 0.020   | 1.10    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU10A20  | 200      | 10.0   | 120.0    | 0.025   | 1.13    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU05A30  | 300      | 5.0    | 100.0    | 0.025   | 1.30    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU10A30  | 300      | 10.0   | 120.0    | 0.025   | 1.40    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSF05A40  | 400      | 5.0    | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSF10A40  | 400      | 10.0   | 120.0    | 0.030   | 1.30    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU05D40  | 400      | 5.0    | 80.0     | 0.030   | 1.53    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSU10D40  | 400      | 10.0   | 120.0    | 0.030   | 1.53    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | FSF03F60  | 600      | 3.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF05F60  | 600      | 5.0    | 80.0     | 0.020   | 1.70    | 5.0      | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF05H60  | 600      | 5.0    | 80.0     | 0.020   | 1.35    | 5.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF05HU60 | 600      | 5.0    | 45.0     | 0.020   | 1.65    | 5.0      | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF08F60  | 600      | 8.0    | 100.0    | 0.020   | 1.70    | 8.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF08H60  | 600      | 8.0    | 100.0    | 0.020   | 1.35    | 8.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF10F60  | 600      | 10.0   | 120.0    | 0.030   | 1.80    | 10.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF10H60  | 600      | 10.0   | 120.0    | 0.030   | 1.35    | 10.0     | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF10HU60 | 600      | 10.0   | 80.0     | 0.020   | 1.65    | 10.0     | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF15F60  | 600      | 15.0   | 140.0    | 0.030   | 1.57    | 15.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSF15H60  | 600      | 15.0   | 140.0    | 0.030   | 1.35    | 15.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSU05D60  | 600      | 5.0    | 60.0     | 0.010   | 2.30    | 5.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSU08D60  | 600      | 8.0    | 90.0     | 0.020   | 2.30    | 8.0      | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSU10D60  | 600      | 10.0   | 100.0    | 0.030   | 2.30    | 10.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | FSU15D60  | 600      | 15.0   | 140.0    | 0.030   | 2.30    | 15.0     | -55 to 175                              |     |                                                                                       |
| TK     | TO-247<br><br>34.5×15.6×5.0(mm)                      | KCF16A20  | 200      | 16.0   | 120.0    | 0.025   | 0.98    | 8.0      | -40 to 150                              |     |  |
|        |                                                                                                                                         | KCU20A20  | 200      | 20.0   | 120.0    | 0.025   | 1.13    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCF25A20  | 200      | 25.0   | 150.0    | 0.025   | 0.98    | 12.5     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCU30A20  | 200      | 30.0   | 150.0    | 0.025   | 1.13    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCU20A30  | 300      | 20.0   | 120.0    | 0.025   | 1.40    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCU30A30  | 300      | 30.0   | 150.0    | 0.025   | 1.30    | 15.0     | -40 to 150                              |     |  |
|        |                                                                                                                                         | KCF16A40  | 400      | 16.0   | 120.0    | 0.030   | 1.25    | 8.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCU20D40  | 400      | 20.0   | 120.0    | 0.030   | 1.53    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCF25A40  | 400      | 25.0   | 200.0    | 0.050   | 1.25    | 12.5     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCU30D40  | 400      | 30.0   | 150.0    | 0.030   | 1.57    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KCF20F60  | 600      | 20.0   | 120.0    | 0.030   | 1.80    | 10.0     | -55 to 175                              |     |  |
|        |                                                                                                                                         | KSF30A20B | 200      | 30.0   | 400.0    | 0.025   | 0.98    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KSU30A30B | 300      | 30.0   | 400.0    | 0.050   | 1.33    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KSF30A40B | 400      | 30.0   | 400.0    | 0.050   | 1.25    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                         | KSF30F60B | 600      | 30.0   | 240.0    | 0.050   | 1.70    | 30.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSF60F60B | 600      | 60.0   | 600.0    | 0.050   | 1.70    | 60.0     | -55 to 175                              |     |  |
|        | TO-247 2pin<br><br>34.5×15.6×5.0(mm)                 | KSF30F60  | 600      | 30.0   | 240.0    | 0.050   | 1.70    | 30.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSF30H60  | 600      | 30.0   | 250.0    | 0.050   | 1.35    | 30.0     | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSU30D60  | 600      | 30.0   | 250.0    | 0.030   | 1.95    | 30.0     | -55 to 175                              |     |                                                                                       |
|        | TO-247 2pin<br>(long lead)<br><br>40.0×15.6×5.0(mm)  | KSF30F60N | 600      | 30.0   | 240.0    | 0.050   | 1.70    | 30.0     | -55 to 175                              |     |  |
|        |                                                                                                                                         | KSF30H60N | 600      | 30.0   | 250.0    | 0.050   | 1.35    | 30.0     | -40 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSU30D60N | 600      | 30.0   | 250.0    | 0.030   | 2.30    | 30.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSF60F60N | 600      | 60.0   | 600.0    | 0.050   | 1.70    | 60.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSF60H60N | 600      | 60.0   | 400.0    | 0.050   | 1.35    | 60.0     | -55 to 175                              |     |                                                                                       |
|        |                                                                                                                                         | KSU60D60N | 600      | 60.0   | 400.0    | 0.050   | 1.95    | 60.0     | -55 to 175                              |     |                                                                                       |



| Series | Outline                                                                                                                         | Part No.     | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit |
|--------|---------------------------------------------------------------------------------------------------------------------------------|--------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------|
| TK     | TO-247<br>(long lead)<br><br>40.0×15.6×5.0(mm) | KCF30F60N    | 600      | 30.0   | 140.0    | 0.030   | 1.57    | 15.0     | -55 to 175                              | ✓   |         |
|        |                                                                                                                                 | KCU60D60N    | 600      | 60.0   | 250.0    | 0.030   | 2.30    | 30.0     | -55 to 175                              |     |         |
| TE     | TO-251<br><br>11.3×6.6×2.4(mm)                 | EA31FS4      | 400      | 3.0    | 45.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | EA61FC2      | 200      | 6.0    | 45.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | EA61FC4      | 400      | 6.0    | 45.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
|        | TO-252<br>(Dpak)<br><br>9.9×6.6×2.4(mm)        | EA31FS2-F    | 200      | 3.0    | 45.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | EA31FS4-F    | 400      | 3.0    | 45.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | ESF03F60-F   | 600      | 3.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              |     |         |
|        |                                                                                                                                 | ESF05H60-F   | 600      | 5.0    | 80.0     | 0.020   | 1.35    | 5.0      | -55 to 175                              |     |         |
|        |                                                                                                                                 | ESF08HU60B-F | 600      | 8.0    | 80.0     | 0.020   | 1.52    | 8.0      | -55 to 175                              |     |         |
|        |                                                                                                                                 | EA61FC2-F    | 200      | 6.0    | 45.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              | ✓   |         |
|        |                                                                                                                                 | EA61FC4-F    | 400      | 6.0    | 45.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              | ✓   |         |
|        |                                                                                                                                 | ECF06F60-F   | 600      | 6.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              | ✓   |         |
| TT     | TO-262 2pin<br><br>22.9×10.1×4.6(mm)          | TSF05A20-11A | 200      | 5.0    | 80.0     | 0.030   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TSU05D60-11A | 600      | 5.0    | 60.0     | 0.010   | 2.30    | 5.0      | -55 to 175                              |     |         |
|        |                                                                                                                                 | TSU10D60-11A | 600      | 10.0   | 100.0    | 0.030   | 2.30    | 10.0     | -55 to 175                              |     |         |
|        | TO-262<br><br>22.9×10.1×4.6(mm)              | TCF10A20-11A | 200      | 10.0   | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU10A20-11A | 200      | 10.0   | 100.0    | 0.020   | 1.10    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF16A20-11A | 200      | 16.0   | 120.0    | 0.025   | 0.98    | 8.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU20A20-11A | 200      | 20.0   | 120.0    | 0.025   | 1.13    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU20A30-11A | 300      | 20.0   | 120.0    | 0.025   | 1.40    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF10A40-11A | 400      | 10.0   | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF10F60-11A | 600      | 10.0   | 80.0     | 0.020   | 1.70    | 5.0      | -55 to 175                              |     |         |
|        | TO-263<br>(D2pak)<br><br>12.8×10.1×4.6(mm)   | TSF05A20     | 200      | 5.0    | 80.0     | 0.030   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TSU05D60     | 600      | 5.0    | 60.0     | 0.010   | 2.30    | 5.0      | -55 to 175                              |     |         |
|        |                                                                                                                                 | TSU10D60     | 600      | 10.0   | 100.0    | 0.030   | 2.30    | 10.0     | -55 to 175                              |     |         |
|        |                                                                                                                                 | TCF10A20     | 200      | 10.0   | 80.0     | 0.020   | 0.98    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU10A20     | 200      | 10.0   | 100.0    | 0.020   | 1.10    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF16A20     | 200      | 16.0   | 120.0    | 0.025   | 0.98    | 8.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU20A20     | 200      | 20.0   | 120.0    | 0.025   | 1.13    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCU20A30     | 300      | 20.0   | 120.0    | 0.025   | 1.40    | 10.0     | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF10A40     | 400      | 10.0   | 80.0     | 0.030   | 1.25    | 5.0      | -40 to 150                              |     |         |
|        |                                                                                                                                 | TCF10F60     | 600      | 10.0   | 80.0     | 0.020   | 1.70    | 5.0      | -55 to 175                              |     |         |
| TU     | TO-263LP<br><br>12.9×10.1×1.7(mm)            | UCU20D30     | 300      | 20.0   | 120.0    | 0.025   | 1.30    | 10.0     | -40 to 175                              |     |         |
|        |                                                                                                                                 | UCF10B40     | 400      | 10.0   | 80.0     | 0.020   | 1.35    | 5.0      | -40 to 150                              | ✓   |         |
|        |                                                                                                                                 | UCF20B40     | 400      | 20.0   | 150.0    | 0.020   | 1.30    | 10.0     | -55 to 175                              | ✓   |         |
| MV     | TO-277<br><br>6.5×4.0×1.1(mm)                | VSF05A20     | 200      | 5.0    | 80.0     | 0.010   | 0.98    | 5.0      | -55 to 175                              | ✓   |         |



## For Automotive AEC-Q101 Qualified Products



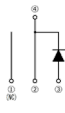
| Series | Outline                                                                                                                           | Part No.   | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|-----------------------------------------------------------------------------------------------------------------------------------|------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| MC     | nSMC_FL<br><br>8.0×4.0×1.5(mm)                   | AMC03FA20  | 200      | 3.0    | 45.0     | 0.010   | 0.98    | 3.0      | -55 to 150                              | ✓   |    |
|        |                                                                                                                                   | AMC03FA40  | 400      | 3.0    | 45.0     | 0.010   | 1.25    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
| ME     | SOD-128<br><br>4.8×2.7×1.0(mm)                   | AME01FA20  | 200      | 1.0    | 20.0     | 0.010   | 0.98    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | AME01FA40  | 400      | 1.0    | 20.0     | 0.010   | 1.25    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | AME01FA60  | 600      | 1.0    | 20.0     | 0.010   | 1.39    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | AME03FA20  | 200      | 3.0    | 45.0     | 0.010   | 0.98    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | AME03FA40  | 400      | 3.0    | 45.0     | 0.010   | 1.25    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
| MP     | SOD-123FL<br><br>3.5×1.6×0.9(mm)                 | AMPP4RA60  | 600      | 0.4    | 20.0     | 0.010   | 1.32    | 0.4      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | AMPP5FA20  | 200      | 0.5    | 20.0     | 0.010   | 0.95    | 0.5      | -55 to 150                              | ✓   |                                                                                       |
| TE     | TO-252(Dpak)<br><br>9.9×6.6×2.4(mm)              | EA61FC2-F  | 200      | 6.0    | 45.0     | 0.010   | 0.98    | 3.0      | -40 to 150                              | ✓   |    |
|        |                                                                                                                                   | EA61FC4-F  | 400      | 6.0    | 45.0     | 0.020   | 1.25    | 3.0      | -40 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                                   | ECF06F60-F | 600      | 6.0    | 45.0     | 0.020   | 1.70    | 3.0      | -55 to 175                              | ✓   |                                                                                       |
| TU     | TO-263LP<br><br>12.9×10.1×1.7(mm)                | UCF10B40   | 400      | 10.0   | 80.0     | 0.020   | 1.35    | 5.0      | -40 to 150                              | ✓   |    |
|        |                                                                                                                                   | UCF20B40   | 400      | 20.0   | 150.0    | 0.020   | 1.30    | 10.0     | -55 to 175                              | ✓   |                                                                                       |
| TK     | TO-247<br>(long lead)<br><br>40.0×15.6×5.0(mm) | KCF30F60N  | 600      | 30.0   | 140.0    | 0.030   | 1.57    | 15.0     | -55 to 175                              | ✓   |  |





| Series | Outline                                                                                                                             | Part No.    | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| TF     | TO-220<br>Full-Mold<br><br><br>28.5×10.1×4.5(mm) | FCQ10A03L   | 30       | 10.0   | 120.0    | 5.000   | 0.47    | 5.0      | -40 to 150                              |     |    |
|        |                                                                                                                                     | FCQ20A03L   | 30       | 20.0   | 180.0    | 10.000  | 0.49    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQ30A03L   | 30       | 30.0   | 250.0    | 15.000  | 0.49    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS10A035  | 35       | 10.0   | 120.0    | 3.000   | 0.46    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS10A045  | 45       | 10.0   | 120.0    | 0.100   | 0.59    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS10A045  | 45       | 10.0   | 120.0    | 0.350   | 0.57    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS10AU045 | 45       | 10.0   | 120.0    | 0.200   | 0.59    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS20A045  | 45       | 20.0   | 180.0    | 0.100   | 0.58    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS20A045  | 45       | 20.0   | 180.0    | 0.600   | 0.57    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS30A045  | 45       | 30.0   | 250.0    | 0.200   | 0.60    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS30A045  | 45       | 30.0   | 200.0    | 1.000   | 0.55    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS30AU045 | 45       | 30.0   | 180.0    | 0.600   | 0.60    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS10A065  | 65       | 10.0   | 120.0    | 0.100   | 0.66    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS10A065  | 65       | 10.0   | 120.0    | 0.400   | 0.61    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS20A065  | 65       | 20.0   | 180.0    | 0.150   | 0.68    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS20A065  | 65       | 20.0   | 180.0    | 1.000   | 0.63    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS20BU065 | 65       | 20.0   | 120.0    | 0.400   | 0.74    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS30A065  | 65       | 30.0   | 200.0    | 0.200   | 0.64    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS30A065  | 65       | 30.0   | 200.0    | 1.500   | 0.64    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCQS30AU065 | 65       | 30.0   | 180.0    | 1.000   | 0.69    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS10A08   | 80       | 10.0   | 120.0    | 0.100   | 0.72    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS20A08   | 80       | 20.0   | 180.0    | 0.150   | 0.75    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS30A08   | 80       | 30.0   | 200.0    | 0.200   | 0.75    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS30AU08  | 80       | 30.0   | 180.0    | 0.150   | 0.81    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH08A10    | 100      | 8.0    | 100.0    | 1.000   | 0.88    | 4.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH10A10    | 100      | 10.0   | 120.0    | 1.000   | 0.86    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH10E10    | 100      | 10.0   | 120.0    | 0.100   | 0.77    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20A10    | 100      | 20.0   | 180.0    | 1.000   | 0.88    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20BU10   | 100      | 20.0   | 120.0    | 0.100   | 1.00    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20E10    | 100      | 20.0   | 180.0    | 0.100   | 0.80    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH30A10    | 100      | 30.0   | 250.0    | 2.000   | 0.88    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH30AU10   | 100      | 30.0   | 200.0    | 0.200   | 0.94    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH30E10    | 100      | 30.0   | 250.0    | 0.100   | 0.80    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS08A12   | 120      | 8.0    | 100.0    | 0.100   | 0.89    | 4.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS10A12   | 120      | 10.0   | 120.0    | 0.100   | 0.86    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS20A12   | 120      | 20.0   | 180.0    | 0.100   | 0.89    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCHS30A12   | 120      | 30.0   | 200.0    | 0.100   | 0.90    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH08A15    | 150      | 8.0    | 125.0    | 1.000   | 0.90    | 4.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH10A15    | 150      | 10.0   | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20A15    | 150      | 20.0   | 180.0    | 1.000   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20BU15   | 150      | 20.0   | 130.0    | 0.100   | 1.00    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH30A15    | 150      | 30.0   | 250.0    | 2.000   | 0.91    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH10A20    | 200      | 10.0   | 100.0    | 0.200   | 0.90    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20A20    | 200      | 20.0   | 120.0    | 0.200   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FCH20AU20   | 200      | 20.0   | 100.0    | 0.200   | 1.05    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRQS20A045  | 45       | 20.0   | 180.0    | 0.600   | 0.57    | 10.0     | -40 to 150                              |     |  |
|        |                                                                                                                                     | FRQS20A065  | 65       | 20.0   | 180.0    | 1.000   | 0.63    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH20A10    | 100      | 20.0   | 180.0    | 1.000   | 0.88    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH08A15    | 150      | 8.0    | 125.0    | 1.000   | 0.90    | 4.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH10A15    | 150      | 10.0   | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH10A15    | 150      | 10.0   | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH10A20    | 200      | 10.0   | 100.0    | 0.200   | 0.90    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                     | FRH20A20    | 200      | 20.0   | 120.0    | 0.200   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |



| Series | Outline                                                                                                                            | Part No.     | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| TF     | TO-220<br>Full-Mold 2pin<br><br>28.5×10.1×4.5(mm) | FSQ05A03L    | 30       | 5.0    | 120.0    | 5.000   | 0.47    | 5.0      | -40 to 150                              |     |    |
|        |                                                                                                                                    | FSQS05A045   | 45       | 5.0    | 120.0    | 0.350   | 0.54    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS30A045   | 45       | 30.0   | 400.0    | 1.000   | 0.56    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS15A045   | 45       | 15.0   | 200.0    | 1.000   | 0.54    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS10A045   | 45       | 10.0   | 180.0    | 0.600   | 0.54    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSHS05A065   | 65       | 5.0    | 120.0    | 0.100   | 0.63    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS05A065   | 65       | 5.0    | 120.0    | 0.400   | 0.58    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS05AU065  | 65       | 5.0    | 100.0    | 0.300   | 0.69    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSQS10A065   | 65       | 10.0   | 180.0    | 1.000   | 0.60    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSHS05A08    | 80       | 5.0    | 120.0    | 0.100   | 0.72    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSH05A10     | 100      | 5.0    | 120.0    | 1.000   | 0.85    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSH10A10     | 100      | 10.0   | 180.0    | 1.000   | 0.88    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSH05A15     | 150      | 5.0    | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSH10A15     | 150      | 10.0   | 180.0    | 1.000   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | FSH05A20     | 200      | 5.0    | 100.0    | 0.200   | 0.90    | 5.0      | -40 to 150                              |     |                                                                                       |
| TE     | TO-251<br><br>11.3×6.3×2.4(mm)                    | EA30QS04     | 40       | 3.0    | 45.0     | 3.000   | 0.55    | 3.0      | -40 to 150                              |     |    |
|        |                                                                                                                                    | EA60QC04     | 40       | 6.0    | 45.0     | 3.000   | 0.55    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC06     | 60       | 6.0    | 45.0     | 3.000   | 0.58    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC10     | 100      | 6.0    | 45.0     | 1.000   | 0.85    | 3.0      | -40 to 150                              |     |                                                                                       |
|        | TO-252<br>(Dpak)<br><br>9.9×6.3×2.4(mm)         | EA30QS03L-F  | 30       | 3.0    | 45.0     | 3.000   | 0.45    | 3.0      | -40 to 150                              |     |   |
|        |                                                                                                                                    | EA30QS04-F   | 40       | 3.0    | 45.0     | 3.000   | 0.55    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA30QS06-F   | 60       | 3.0    | 45.0     | 3.000   | 0.58    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA30QS10-F   | 100      | 3.0    | 45.0     | 1.000   | 0.85    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA30QS10-F   | 100      | 3.0    | 45.0     | 1.000   | 0.85    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ESH05A15-F   | 150      | 5.0    | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC03L-F  | 30       | 6.0    | 45.0     | 3.000   | 0.45    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ECQS10A035-F | 35       | 10.0   | 100.0    | 3.000   | 0.47    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC04-F   | 40       | 6.0    | 45.0     | 3.000   | 0.55    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ECQS10A045-F | 45       | 10.0   | 120.0    | 0.350   | 0.57    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC06-F   | 60       | 6.0    | 45.0     | 3.000   | 0.58    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ECHS10A08-F  | 80       | 10.0   | 100.0    | 0.100   | 0.70    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | EA60QC10-F   | 100      | 6.0    | 45.0     | 1.000   | 0.85    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ECH06A20-F   | 200      | 6.0    | 60.0     | 0.200   | 0.90    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | ECHS10A08-F  | 80       | 10.0   | 100.0    | 0.100   | 0.70    | 5.0      | -40 to 150                              |     |                                                                                       |
| NA     | NA<br>(DO-221BC)<br><br>4.7×2.4×0.92(mm)        | NA03QSA035   | 35       | 3.0    | 60.0     | 2.000   | 0.47    | 3.0      | -40 to 150                              |     |  |
|        |                                                                                                                                    | NA05QSA035   | 35       | 5.0    | 100.0    | 3.000   | 0.47    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03QSA045   | 45       | 3.0    | 60.0     | 0.200   | 0.55    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA05QSA045   | 45       | 5.0    | 100.0    | 0.350   | 0.57    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03HSA065   | 65       | 3.0    | 80.0     | 0.070   | 0.66    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03QSA065   | 65       | 3.0    | 60.0     | 0.300   | 0.61    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA05HSA065   | 65       | 5.0    | 120.0    | 0.100   | 0.66    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA05QSA065   | 65       | 5.0    | 100.0    | 0.400   | 0.61    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03HSA08    | 80       | 3.0    | 80.0     | 0.100   | 0.70    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA05HSA08    | 80       | 5.0    | 120.0    | 0.100   | 0.70    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03HSA12    | 120      | 3.0    | 60.0     | 0.070   | 0.86    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA05HSA12    | 120      | 5.0    | 100.0    | 0.100   | 0.86    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03HA15     | 150      | 3.0    | 60.0     | 1.000   | 0.90    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NA03HA20     | 200      | 3.0    | 110.0    | 1.000   | 0.90    | 3.0      | -40 to 150                              |     |                                                                                       |
| NB     | NB<br><br>4.7×5.6×0.92(mm)                      | NB06QSA035   | 35       | 6.0    | 60.0     | 2.000   | 0.47    | 3.0      | -40 to 150                              |     |  |
|        |                                                                                                                                    | NB10QSA035   | 35       | 10.0   | 100.0    | 3.000   | 0.47    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB06QSA045   | 45       | 6.0    | 60.0     | 0.200   | 0.55    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB10QSA045   | 45       | 10.0   | 100.0    | 0.350   | 0.57    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB06HSA065   | 65       | 6.0    | 80.0     | 0.070   | 0.66    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB06QSA065   | 65       | 6.0    | 60.0     | 0.300   | 0.61    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB10HSA065   | 65       | 10.0   | 120.0    | 0.100   | 0.66    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB10QSA065   | 65       | 10.0   | 100.0    | 0.400   | 0.61    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB06HSA08    | 80       | 6.0    | 80.0     | 0.100   | 0.70    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB10HSA08    | 80       | 10.0   | 120.0    | 0.100   | 0.70    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB06HSA12    | 120      | 6.0    | 60.0     | 0.070   | 0.86    | 3.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                                    | NB10HSA12    | 120      | 10.0   | 100.0    | 0.100   | 0.86    | 5.0      | -40 to 150                              |     |                                                                                       |



| Series | Outline                                                                                                                    | Part No.      | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|----------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| TK     | TO-247<br><br>34.5×15.6×5.0(mm)           | KCQ30A03L     | 30       | 30.0   | 250.0    | 15.000  | 0.49    | 15.0     | -40 to 125                              |     |    |
|        |                                                                                                                            | KCQ60A03L     | 30       | 60.0   | 400.0    | 25.000  | 0.50    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ20A04      | 40       | 20.0   | 180.0    | 10.000  | 0.55    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ30A04      | 40       | 30.0   | 300.0    | 15.000  | 0.55    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ60A04      | 40       | 60.0   | 400.0    | 25.000  | 0.58    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ20A06      | 60       | 20.0   | 150.0    | 10.000  | 0.65    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH30A06      | 60       | 30.0   | 200.0    | 1.000   | 0.69    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ30A06      | 60       | 30.0   | 200.0    | 15.000  | 0.65    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCQ60A06      | 60       | 60.0   | 400.0    | 25.000  | 0.67    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH20A10      | 100      | 20.0   | 180.0    | 1.000   | 0.88    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH30A10      | 100      | 30.0   | 250.0    | 2.000   | 0.88    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH30A15      | 150      | 30.0   | 250.0    | 2.000   | 0.91    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH20A20      | 200      | 20.0   | 120.0    | 0.200   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KCH30A20      | 200      | 30.0   | 150.0    | 0.300   | 0.92    | 15.0     | -40 to 150                              |     |                                                                                       |
|        | TO-247 2pin<br><br>34.5×15.6×5.0(mm)      | KSQ15A04      | 40       | 15.0   | 250.0    | 15.000  | 0.55    | 15.0     | -40 to 150                              |     |    |
|        |                                                                                                                            | KSQ30A04      | 40       | 30.0   | 400.0    | 25.000  | 0.58    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KSQ15A06      | 60       | 15.0   | 200.0    | 15.000  | 0.65    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KSQ30A06      | 60       | 30.0   | 400.0    | 25.000  | 0.67    | 30.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KSH15A10      | 100      | 15.0   | 250.0    | 2.000   | 0.88    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | KSH30A20      | 200      | 30.0   | 300.0    | 0.500   | 0.95    | 30.0     | -40 to 150                              |     |                                                                                       |
| TT     | TO-262<br><br>22.9×10.1×4.6(mm)          | TCQ20A03L-11A | 30       | 20.0   | 180.0    | 10.000  | 0.45    | 10.0     | -40 to 150                              |     |   |
|        |                                                                                                                            | TCQ10A04-11A  | 40       | 10.0   | 120.0    | 5.000   | 0.55    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ20A04-11A  | 40       | 20.0   | 180.0    | 10.000  | 0.55    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ30A04-11A  | 40       | 30.0   | 250.0    | 15.000  | 0.55    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ30A06-11A  | 60       | 30.0   | 200.0    | 15.000  | 0.65    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH10A15-11A  | 150      | 10.0   | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH20A15-11A  | 150      | 20.0   | 180.0    | 1.000   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH30A15-11A  | 150      | 30.0   | 250.0    | 2.000   | 0.91    | 15.0     | -40 to 150                              |     |                                                                                       |
|        | TO-263 (D2pak)<br><br>12.8×10.1×4.6(mm) | TCQ20A03L     | 30       | 20.0   | 180.0    | 10.000  | 0.45    | 10.0     | -40 to 150                              |     |  |
|        |                                                                                                                            | TCQ10A04      | 40       | 10.0   | 120.0    | 5.000   | 0.55    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ20A04      | 40       | 20.0   | 180.0    | 10.000  | 0.55    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ30A04      | 40       | 30.0   | 250.0    | 15.000  | 0.55    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCQ30A06      | 60       | 30.0   | 200.0    | 15.000  | 0.65    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH10A15      | 150      | 10.0   | 130.0    | 1.000   | 0.88    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH20A15      | 150      | 20.0   | 180.0    | 1.000   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH30A15      | 150      | 30.0   | 250.0    | 2.000   | 0.91    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | TCH20A20      | 200      | 20.0   | 120.0    | 0.200   | 0.90    | 10.0     | -40 to 150                              |     |                                                                                       |
|        | TO-263LP<br><br>12.9×10.1×1.7(mm)       | UCQ30A03      | 30       | 30.0   | 230.0    | 1.500   | 0.50    | 15.0     | -40 to 150                              |     |  |
|        |                                                                                                                            | UCQS20A045    | 45       | 20.0   | 220.0    | 0.600   | 0.54    | 10.0     | -40 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                            | UCQS30A045    | 45       | 30.0   | 250.0    | 1.000   | 0.55    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS10A065    | 65       | 10.0   | 120.0    | 0.100   | 0.63    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCQS10A065    | 65       | 10.0   | 120.0    | 0.400   | 0.61    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS10A08     | 80       | 10.0   | 120.0    | 0.100   | 0.69    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS20A08     | 80       | 20.0   | 220.0    | 0.150   | 0.71    | 10.0     | -40 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                            | UCHS30A08     | 80       | 30.0   | 250.0    | 0.100   | 0.79    | 15.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS10A12     | 120      | 10.0   | 120.0    | 0.100   | 0.84    | 5.0      | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS20A12     | 120      | 20.0   | 220.0    | 0.100   | 0.87    | 10.0     | -40 to 150                              |     |                                                                                       |
|        |                                                                                                                            | UCHS30A12     | 120      | 30.0   | 250.0    | 0.100   | 0.90    | 15.0     | -40 to 150                              |     |                                                                                       |

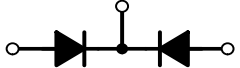
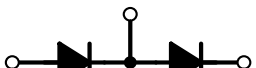


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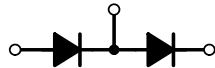
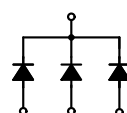
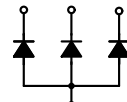
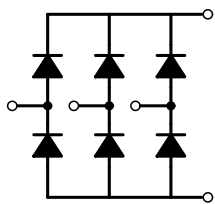


| Series | Outline                                                                                                                      | Part No.   | VRRM [V] | Io [A] | IFSM [A] | IR [mA] | VFM [V] | @IFM [A] | T <sub>jw</sub> , T <sub>stg</sub> [°C] | AEC | Circuit                                                                               |
|--------|------------------------------------------------------------------------------------------------------------------------------|------------|----------|--------|----------|---------|---------|----------|-----------------------------------------|-----|---------------------------------------------------------------------------------------|
| MA     | DO-221BC<br><br>4.8×2.7×1.0(mm)             | AMA10EB045 | 45       | 10.0   | 200.0    | 0.600   | 0.54    | 10.0     | -55 to 150                              | ✓   |    |
|        |                                                                                                                              | AMA10EA06  | 60       | 10.0   | 200.0    | 0.600   | 0.56    | 10.0     | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMA10XA10  | 100      | 10.0   | 130.0    | 0.300   | 0.73    | 10.0     | -55 to 150                              | ✓   |                                                                                       |
| MC     | nSMC_FL<br><br>8.0×4.0×1.5(mm)              | AMC03HD10  | 100      | 3.0    | 60.0     | 0.100   | 0.85    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC03HA15  | 150      | 3.0    | 60.0     | 0.100   | 0.90    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC03EA03  | 30       | 3.0    | 60.0     | 0.300   | 0.45    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC05EA03  | 30       | 5.0    | 100.0    | 0.300   | 0.48    | 5.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC03EA045 | 45       | 3.0    | 60.0     | 0.200   | 0.55    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC03EA06  | 60       | 3.0    | 60.0     | 0.200   | 0.57    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMC05EA06  | 60       | 5.0    | 100.0    | 0.300   | 0.60    | 5.0      | -55 to 150                              | ✓   |                                                                                       |
| ME     | SOD-128<br><br>4.8×2.7×1.0(mm)              | AME01EA03  | 30       | 1.0    | 20.0     | 0.100   | 0.45    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AME03EA03  | 30       | 3.0    | 60.0     | 0.300   | 0.45    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AME01EA045 | 45       | 1.0    | 18.0     | 0.100   | 0.55    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AME03EA045 | 45       | 3.0    | 60.0     | 0.200   | 0.55    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | ME01EA06   | 60       | 1.0    | 18.0     | 0.100   | 0.58    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | ME03EA06   | 60       | 3.0    | 60.0     | 0.200   | 0.57    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | ME03HD10   | 100      | 3.0    | 60.0     | 0.100   | 0.85    | 3.0      | -55 to 150                              | ✓   |                                                                                       |
| MP     | SOD-123FL<br><br>3.5×1.6×0.9(mm)           | AMP01EA03  | 30       | 1.0    | 20.0     | 0.100   | 0.45    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMP01EA045 | 45       | 1.0    | 18.0     | 0.100   | 0.55    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMP01EA06  | 60       | 1.0    | 18.0     | 0.100   | 0.60    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
|        |                                                                                                                              | AMP01HD10  | 100      | 1.0    | 20.0     | 0.050   | 0.85    | 1.0      | -55 to 150                              | ✓   |                                                                                       |
| TU     | TO-263LP<br><br>12.9×10.1×1.7(mm)         | UCQS20A045 | 45       | 20.0   | 220.0    | 0.600   | 0.54    | 10.0     | -40 to 150                              | ✓   |  |
|        |                                                                                                                              | UCHS20A08  | 80       | 20.0   | 220.0    | 0.150   | 0.71    | 10.0     | -40 to 150                              | ✓   |                                                                                       |
| TF     | TO-220 Full-Mold<br><br>28.5×10.1×4.5(mm) | FCQS20A045 | 45       | 20.0   | 180.0    | 0.600   | 0.57    | 10.0     | -40 to 150                              | ✓   |                                                                                       |

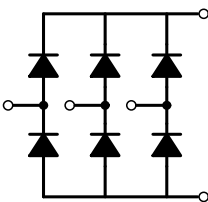


| Series | Outline                                                                                                      | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PH     | E-35<br>100×60×46.5(mm)<br> | K35DH400P080AAA | 800      | 400    | ✓  |    |
|        |                                                                                                              | K35DH400P160AAA | 1600     | 400    | ✓  |                                                                                       |
| PC     | E-2<br>93×26.5×30(mm)<br>   | K02DC030P080AAA | 800      | 30     | ✓  |    |
|        |                                                                                                              | K02DC060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K02DC100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br>   | K03DC030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K03DC060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K03DC100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-4<br>150×40×33(mm)<br>    | K04DC150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K04DC200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K04DC250P080AAA | 800      | 250    | ✓  |                                                                                       |
|        |                                                                                                              | K04DC150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K04DC200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K04DC250P160AAA | 1600     | 250    | ✓  |                                                                                       |
|        | E-34<br>180×60×50(mm)<br>   | K34DC400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                              | K34DC400P160AAA | 1600     | 400    | ✓  |                                                                                       |
| PD     | E-60<br>150×60×52(mm)<br> | PD30KN8         | 800      | 30     | ✓  |  |
|        |                                                                                                              | PD60KN8         | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | PD100KN8        | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PD30KN16        | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | PD60KN16        | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | PD100KN16       | 1600     | 100    | ✓  |                                                                                       |
|        | E-61<br>89×36×17(mm)<br>  | PD150KN8        | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PD200KN8        | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PD250KN8A       | 800      | 250    | ✓  |                                                                                       |
|        |                                                                                                              | PD150KN16       | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PD200KN16       | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PD250KN16A      | 1600     | 250    | ✓  |                                                                                       |
|        | E-58<br>94×35×30(mm)<br>  | PD150S8         | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PD200S8         | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PD230S8         | 800      | 230    | ✓  |                                                                                       |
|        |                                                                                                              | PD150S16        | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PD200S16        | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PD230S16        | 1600     | 230    | ✓  |                                                                                       |
|        | E-79<br>93×20×30(mm)<br>  | PD150S22        | 2200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PD100MYN16      | 1600     | 100    | ✓  |                                                                                       |
|        | E-80<br>94×34×30(mm)<br>  | PD100MYN18      | 1800     | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PD200MYN16      | 1600     | 200    | ✓  |                                                                                       |
|        | E-81<br>115×50×52(mm)<br> | PD200MYN18      | 1800     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PD260MYN16      | 1600     | 260    | ✓  |                                                                                       |
|        |                                                                                                              | PD260MYN18      | 1800     | 260    | ✓  |                                                                                       |
|        |                                                                                                              | PD380MYN16      | 1600     | 380    | ✓  |                                                                                       |
|        | E-82<br>150×60×52(mm)<br> | PD380MYN18      | 1800     | 380    | ✓  |                                                                                       |
|        |                                                                                                              | PD700MYN16      | 1600     | 700    | ✓  |                                                                                       |
|        | E-2<br>93×26.5×30(mm)<br> | PD700MYN18      | 1800     | 700    | ✓  |                                                                                       |
|        |                                                                                                              | K02DD030P080AAA | 800      | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K02DD060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K02DD100P080AAA | 800      | 100    | ✓  |                                                                                       |

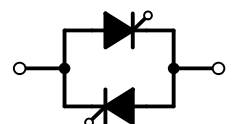
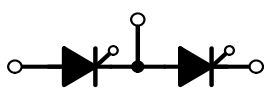
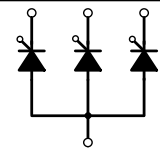


| Series | Outline                                                                                                       | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|---------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PD     | E-3<br>93×26.7×30(mm)<br>    | K03DD030P160AAA | 1600     | 30     | ✓  |    |
|        |                                                                                                               | K03DD060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K03DD100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                               | K03DD100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-5<br>150×40×33(mm)<br>     | K05DD150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05DD200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K05DD250P080AAA | 800      | 250    | ✓  |                                                                                       |
|        |                                                                                                               | K05DD150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05DD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K05DD250P160AAA | 1600     | 250    | ✓  |                                                                                       |
|        | E-34<br>180×60×50(mm)<br>    | K34DD400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                               | K34DD400P160AAA | 1600     | 400    | ✓  |                                                                                       |
|        | E-44<br>108×34×30(mm)<br>    | K44DD150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K44DD200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K44DD150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K44DD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
| PE     | E-2<br>93×26.5×30(mm)<br>   | PE30SN8         | 800      | 30     |    |   |
|        |                                                                                                               | PE30SN16        | 1600     | 30     |    |                                                                                       |
|        |                                                                                                               | PE100SN8        | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                               | K02DE030N080AAA | 800      | 30     |    |                                                                                       |
|        |                                                                                                               | K02DE060N080AAA | 800      | 60     |    |                                                                                       |
|        |                                                                                                               | K02DE100N080AAA | 800      | 100    |    |                                                                                       |
| PF     | E-64<br>82×42×22(mm)<br>   | PF30SN8         | 800      | 30     |    |  |
|        |                                                                                                               | PF30SN16        | 1600     | 30     |    |                                                                                       |
|        |                                                                                                               | PF100SN8        | 800      | 100    | ✓  |                                                                                       |
| PR     | E-2<br>93×26.5×30(mm)<br>  | K02DR060P080AAA | 800      | 60     | ✓  |  |
|        | E-73<br>89×36×17(mm)                                                                                          | PR250KN8N       | 800      | 250    |    |                                                                                       |
| PT     | E-62<br>80.5×44×17(mm)<br> | PT50KN8         | 800      | 50     | ✓  |  |
|        |                                                                                                               | PT75KN8         | 800      | 75     | ✓  |                                                                                       |
|        |                                                                                                               | PT100KN8        | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                               | PT50KN16        | 1600     | 50     | ✓  |                                                                                       |
|        |                                                                                                               | PT75KN16        | 1600     | 75     | ✓  |                                                                                       |
| PT     | E-63<br>91×52×17(mm)<br>   | PT100KN16       | 1600     | 100    | ✓  |                                                                                       |
|        |                                                                                                               | PT150KN8        | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | PT200KN8        | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | PT150KN16       | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | PT200KN16       | 1600     | 200    | ✓  |                                                                                       |
| PT     | E-64<br>82×42×22(mm)<br>   | PT50SN8         | 800      | 50     | ✓  |                                                                                       |
|        |                                                                                                               | PT76SN8         | 800      | 75     | ✓  |                                                                                       |
|        |                                                                                                               | PT100SN8        | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                               | PT50SN16        | 1600     | 50     | ✓  |                                                                                       |
|        |                                                                                                               | PT76SN16        | 1600     | 75     | ✓  |                                                                                       |
|        |                                                                                                               | PT100SN16       | 1600     | 100    | ✓  |                                                                                       |
|        |                                                                                                               | K64DT150P080AAA | 800      | 150    | ✓  |                                                                                       |

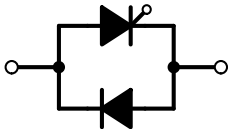
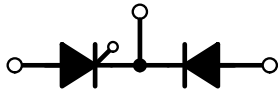
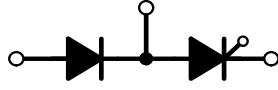


| Series | Outline                                                                                                      | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                             |
|--------|--------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|-------------------------------------------------------------------------------------|
| PT     | E-18<br>110×50×29(mm)<br>   | PT150N8         | 800      | 150    | ✓  |  |
|        |                                                                                                              | PT200N8         | 800      | 200    | ✓  |                                                                                     |
|        |                                                                                                              | PT150N16        | 1600     | 150    | ✓  |                                                                                     |
|        |                                                                                                              | PT200N16        | 1600     | 200    | ✓  |                                                                                     |
|        | E-77<br>72×42×30(mm)<br>    | PT80MYN16       | 1600     | 80     | ✓  |                                                                                     |
|        |                                                                                                              | PT80MYN18       | 1800     | 80     | ✓  |                                                                                     |
|        | E-78<br>94×54×30(mm)<br>    | PT150MYN16      | 1600     | 150    | ✓  |                                                                                     |
|        |                                                                                                              | PT150MYN18      | 1800     | 150    | ✓  |                                                                                     |
|        |                                                                                                              | PT200MYN16      | 1600     | 200    | ✓  |                                                                                     |
|        |                                                                                                              | PT200MYN18      | 1800     | 200    | ✓  |                                                                                     |
|        | E-7<br>80.3×40.4×27(mm)<br> | K07DT050P080AAA | 800      | 50     | ✓  |                                                                                     |
|        |                                                                                                              | K07DT100P080AAF | 800      | 100    | ✓  |                                                                                     |

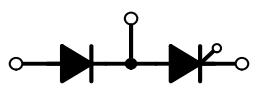
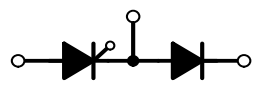
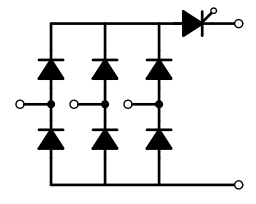


| Series | Outline                                                                                                       | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|---------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PHT    | E-38<br>38×30×17(mm)<br>     | PHT308C         | 800      | 30     |    |    |
|        |                                                                                                               | PHT608C         | 800      | 60     |    |                                                                                       |
|        |                                                                                                               | PHT608AC        | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                               | PHT6016AC       | 1600     | 60     | ✓  |                                                                                       |
|        | E-42<br>97.2×41.2×30(mm)<br> | PHT250N8        | 800      | 250    | ✓  |                                                                                       |
|        |                                                                                                               | PHT250N16       | 1600     | 250    | ✓  |                                                                                       |
| PAT    | E-2<br>93×26.5×30(mm)<br>    | K02TA030P080AAA | 800      | 30     | ✓  |    |
|        |                                                                                                               | K02TA060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K02TA100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br>    | K03TA030P080AAA | 800      | 30     | ✓  |                                                                                       |
|        |                                                                                                               | K03TA060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K03TA100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                               | K03TA030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                               | K03TA060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K03TA100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-5<br>150×40×33(mm)<br>    | K05TA150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05TA200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K05TA150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05TA200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        | E-34<br>150×40×33(mm)<br>  | K34TA400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                               | K34TA400P160AAA | 1600     | 400    | ✓  |                                                                                       |
| PDT    | E-2<br>93×26.5×30(mm)<br>  | K02TD030P080AAA | 800      | 30     | ✓  |  |
|        |                                                                                                               | K02TD060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K02TD100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br>  | K03TD030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                               | K03TD060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                               | K03TD100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-5<br>150×40×33(mm)<br>   | K05TD150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05TD200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K05TD150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K05TD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        | E-34<br>180×60×50(mm)<br>  | K34TD400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                               | K34TD400P160AAA | 1600     | 400    | ✓  |                                                                                       |
|        | E-44<br>108×34×30(mm)<br>  | K44TD150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K44TD200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                               | K44TD150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                               | K44TD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
| PFT    | E-3<br>93×26.7×30(mm)<br>  | K03TF080N040AAA | 400      | 80     |    |  |
|        |                                                                                                               | K03TF100N040AAA | 400      | 100    |    |                                                                                       |
|        | E-44<br>108×34×30(mm)<br>  | K44TF150N040AAA | 400      | 150    |    |                                                                                       |
|        |                                                                                                               | K44TF200N040AAA | 400      | 200    |    |                                                                                       |



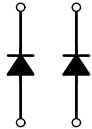
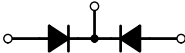
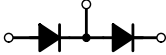
| Series | Outline                                                                                                      | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PAH    | E-66<br>82×42×22(mm)<br>    | PAH30N8CM       | 800      | 30     | ✓  |    |
|        |                                                                                                              | PAH60N8CM       | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | PAH100N8CM      | 800      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PAH30N16CM      | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | PAH60N16CM      | 1600     | 60     | ✓  |                                                                                       |
|        | E-71<br>82×35×14(mm)<br>    | PAH60LN8        | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | PAH60LN16       | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | PAH100N8        | 800      | 100    | ✓  |                                                                                       |
|        | E-72<br>98×32×27(mm)<br>    | PAH100N16       | 1600     | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PAH150N16       | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PAH200N8        | 800      | 200    | ✓  |                                                                                       |
|        |                                                                                                              | PAH250N8        | 800      | 250    | ✓  |                                                                                       |
|        |                                                                                                              | PAH300N8        | 800      | 300    | ✓  |                                                                                       |
|        | E-2<br>93×26.5×30(mm)<br>   | K02HA030P080AAA | 800      | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K02HA060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K02HA100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br>  | K03HA030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K03HA060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K03HA100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-5<br>150×40×33(mm)<br>  | K05HA150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K05HA150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K05HA200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        | E-34<br>150×40×33(mm)<br> | K05HA200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K34HA400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                              | K34HA400P160AAA | 1600     | 400    | ✓  |                                                                                       |
| PCH    | E-2<br>93×26.5×30(mm)<br> | K02HC030P080AAA | 800      | 30     | ✓  |  |
|        |                                                                                                              | K02HC060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K02HC100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br> | K03HC030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K03HC060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K03HC100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-4<br>150×40×33(mm)<br>  | K04HC150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K04HC150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K04HC200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        | E-34<br>150×40×33(mm)<br> | K04HC200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K34HC400P080AAA | 800      | 400    | ✓  |                                                                                       |
|        |                                                                                                              | K34HC400P160AAA | 1600     | 400    | ✓  |                                                                                       |
| PDH    | E-2<br>93×26.5×30(mm)<br> | K02HD030P080AAA | 800      | 30     | ✓  |  |
|        |                                                                                                              | K02HD060P080AAA | 800      | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K02HD100P080AAA | 800      | 100    | ✓  |                                                                                       |
|        | E-3<br>93×26.7×30(mm)<br> | K03HD030P160AAA | 1600     | 30     | ✓  |                                                                                       |
|        |                                                                                                              | K03HD060P160AAA | 1600     | 60     | ✓  |                                                                                       |
|        |                                                                                                              | K03HD100P160AAA | 1600     | 100    | ✓  |                                                                                       |
|        | E-5<br>150×40×33(mm)<br>  | K05HD150P080AAA | 800      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K05HD150P160AAA | 1600     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | K05HD200P080AAA | 800      | 200    | ✓  |                                                                                       |
|        | E-34<br>150×40×33(mm)<br> | K05HD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K05HD200P160AAA | 1600     | 200    | ✓  |                                                                                       |
|        |                                                                                                              | K05HD200P160AAA | 1600     | 200    | ✓  |                                                                                       |



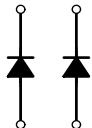
| Series | Outline                                                                                                      | Part No.        | VRRM [V] | Io [A] | UL | Circuit                                                                              |
|--------|--------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|--------------------------------------------------------------------------------------|
| PDH    | E-34<br>150×40×33(mm)<br>   | K34HD400P080AAA | 800      | 400    | ✓  |   |
|        |                                                                                                              | K34HD400P160AAA | 1600     | 400    | ✓  |                                                                                      |
|        | E-44<br>108×34×30(mm)<br>   | K44HD150P080AAA | 800      | 150    | ✓  |                                                                                      |
|        |                                                                                                              | K44HD150P160AAA | 1600     | 150    | ✓  |                                                                                      |
|        |                                                                                                              | K44HD200P080AAA | 800      | 200    | ✓  |                                                                                      |
|        |                                                                                                              | K44HD200P160AAA | 1600     | 200    | ✓  |                                                                                      |
| PKH    | E-2<br>93×26.5×30(mm)<br>   | K02HK030P080AAA | 800      | 30     | ✓  |   |
|        |                                                                                                              | K02HK060P080AAA | 800      | 60     | ✓  |                                                                                      |
|        |                                                                                                              | K02HK100P080AAA | 800      | 100    | ✓  |                                                                                      |
|        | E-3<br>93×26.7×30(mm)<br>   | K03HK030P160AAA | 1600     | 30     | ✓  |                                                                                      |
|        |                                                                                                              | K03HK060P160AAA | 1600     | 60     | ✓  |                                                                                      |
|        |                                                                                                              | K03HK100P160AAA | 1600     | 100    | ✓  |                                                                                      |
| PGH    | E-68<br>97×44×22.5(mm)<br> | PGH50N8         | 800      | 50     | ✓  |  |
|        |                                                                                                              | PGH75N8         | 800      | 75     | ✓  |                                                                                      |
|        |                                                                                                              | PGH100N8        | 800      | 100    | ✓  |                                                                                      |
|        |                                                                                                              | PGH101N8        | 800      | 100    | ✓  |                                                                                      |
|        |                                                                                                              | PGH50N16        | 1600     | 50     | ✓  |                                                                                      |
|        |                                                                                                              | PGH75N16        | 1600     | 75     | ✓  |                                                                                      |
|        |                                                                                                              | PGH100N16       | 1600     | 100    | ✓  |                                                                                      |
|        | E-69<br>108×62×27(mm)<br> | PGH150N8        | 800      | 150    | ✓  |                                                                                      |
|        |                                                                                                              | PGH200N8        | 800      | 200    | ✓  |                                                                                      |
|        |                                                                                                              | PGH150N16       | 1600     | 150    | ✓  |                                                                                      |
|        |                                                                                                              | PGH200N16       | 1600     | 200    | ✓  |                                                                                      |
|        |                                                                                                              |                 |          |        |    |                                                                                      |



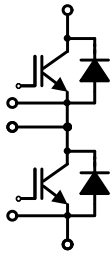
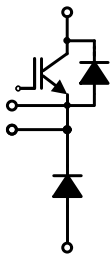
## FRDモジュール FRD Modules

| Series | Outline                                                                                                     | Part No.   | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|-------------------------------------------------------------------------------------------------------------|------------|----------|--------|----|---------------------------------------------------------------------------------------|
| P2H    | E-38<br>38×30×17(mm)<br>   | P2H30F2    | 200      | 30     |    |    |
|        |                                                                                                             | P2H60F2    | 200      | 60     |    |                                                                                       |
|        |                                                                                                             | P2H80F2    | 200      | 80     |    |                                                                                       |
|        |                                                                                                             | P2H30F4    | 400      | 30     |    |                                                                                       |
|        |                                                                                                             | P2H60F4    | 400      | 60     |    |                                                                                       |
|        |                                                                                                             | P2H80F4    | 400      | 80     |    |                                                                                       |
|        |                                                                                                             | P2H30F6    | 600      | 30     |    |                                                                                       |
|        |                                                                                                             | P2H60F6    | 600      | 60     | ✓  |                                                                                       |
|        |                                                                                                             | P2H50F12   | 1200     | 50     | ✓  |                                                                                       |
| PC     | E-79<br>93×20×30(mm)<br>   | PC100FYN6  | 600      | 100    | ✓  |    |
|        |                                                                                                             | PC100FYN6C | 600      | 100    | ✓  |                                                                                       |
|        |                                                                                                             | PC151FYN6  | 600      | 150    | ✓  |                                                                                       |
|        |                                                                                                             | PC151FYN6C | 600      | 150    | ✓  |                                                                                       |
|        | E-80<br>94×34×30(mm)<br>  | PC150FYN6  | 600      | 150    | ✓  |                                                                                       |
|        |                                                                                                             | PC150FYN6C | 600      | 150    | ✓  |                                                                                       |
|        |                                                                                                             | PC200FYN6  | 600      | 200    | ✓  |                                                                                       |
|        |                                                                                                             | PC200FYN6C | 600      | 200    | ✓  |                                                                                       |
| PD     | E-79<br>93×20×30(mm)<br> | PD100FYN6  | 600      | 100    | ✓  |  |
|        |                                                                                                             | PD151FYN6  | 600      | 150    | ✓  |                                                                                       |
|        | E-80<br>94×34×30(mm)<br> | PD150FYN6  | 600      | 150    | ✓  |                                                                                       |
|        |                                                                                                             | PD200FYN6  | 600      | 200    | ✓  |                                                                                       |
|        |                                                                                                             |            |          |        |    |                                                                                       |

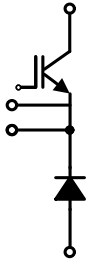
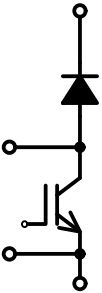
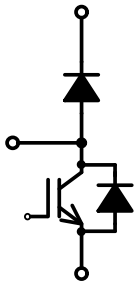
## SBDモジュール SBD Modules

| Series | Outline                                                                                                     | Part No.  | VRRM [V] | Io [A] | UL | Circuit                                                                               |
|--------|-------------------------------------------------------------------------------------------------------------|-----------|----------|--------|----|---------------------------------------------------------------------------------------|
| P2H    | E-38<br>38×30×17(mm)<br> | P2H30QH10 | 100      | 30     |    |  |
|        |                                                                                                             | P2H60QH10 | 100      | 60     |    |                                                                                       |
|        |                                                                                                             | P2H80QH10 | 100      | 80     |    |                                                                                       |
|        |                                                                                                             | P2H30QH20 | 200      | 30     |    |                                                                                       |
|        |                                                                                                             | P2H60QH20 | 200      | 60     |    |                                                                                       |
|        |                                                                                                             | P2H80QH20 | 200      | 80     |    |                                                                                       |



| Series | Outline                                                                                                      | Part No.        | Vces [V] | Ic [A] | UL | Circuit                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------|-----------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PHMB   | E-38<br>38×30×17(mm)<br>    | K38IH100P065TAA | 650      | 100    | ✓  |    |
|        |                                                                                                              | K38IH075P125TAA | 1250     | 75     | ✓  |                                                                                       |
| PDMB   | E-74<br>94×35×30(mm)<br>    | PDMB50W6        | 650      | 50     | ✓  |    |
|        |                                                                                                              | PDMB75W6        | 650      | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PDMB100W6       | 650      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PDMB150W6       | 650      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PDMB200W6       | 650      | 200    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>    | PDMB300W6       | 650      | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PDMB400W6       | 650      | 400    | ✓  |                                                                                       |
|        | E-74<br>94×35×30(mm)<br>    | PDMB50W12       | 1200     | 50     | ✓  |                                                                                       |
|        |                                                                                                              | PDMB75W12       | 1200     | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PDMB100W12      | 1200     | 100    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>    | PDMB150W12      | 1200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PDMB200W12      | 1200     | 200    | ✓  |                                                                                       |
|        | E-56<br>108×62×30(mm)<br>  | PDMB300W12      | 1200     | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PDMB400W12      | 1200     | 400    | ✓  |                                                                                       |
| PCFMB  | E-74<br>94×35×30(mm)<br>  | PCFMB50W6       | 650      | 50     | ✓  |  |
|        |                                                                                                              | PCFMB75W6       | 650      | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB100W6      | 650      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB150W6      | 650      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB200W6      | 650      | 200    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PCFMB300W6      | 650      | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB400W6      | 650      | 400    | ✓  |                                                                                       |
|        | E-74<br>94×35×30(mm)<br>  | PCFMB50W12      | 1200     | 50     | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB75W12      | 1200     | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB100W12     | 1200     | 100    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PCFMB150W12     | 1200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB200W12     | 1200     | 200    | ✓  |                                                                                       |
|        | E-56<br>108×62×30(mm)<br> | PCFMB300W12     | 1200     | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PCFMB400W12     | 1200     | 400    | ✓  |                                                                                       |



| Series | Outline                                                                                                      | Part No.    | Vces [V] | Ic [A] | UL | Circuit                                                                               |
|--------|--------------------------------------------------------------------------------------------------------------|-------------|----------|--------|----|---------------------------------------------------------------------------------------|
| PCHMB  | E-74<br>94×35×30(mm)<br>    | PCHMB50W6   | 650      | 50     | ✓  |    |
|        |                                                                                                              | PCHMB75W6   | 650      | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB100W6  | 650      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB150W6  | 650      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB200W6  | 650      | 200    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>    | PCHMB300W6  | 650      | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB400W6  | 650      | 400    | ✓  |                                                                                       |
|        | E-74<br>94×35×30(mm)<br>    | PCHMB50W12  | 1200     | 50     | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB75W12  | 1200     | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB100W12 | 1200     | 100    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>    | PCHMB150W12 | 1200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB200W12 | 1200     | 200    | ✓  |                                                                                       |
|        | E-56<br>108×62×30(mm)<br>   | PCHMB300W12 | 1200     | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PCHMB400W12 | 1200     | 400    | ✓  |                                                                                       |
| PRHMB  | E-74<br>94×35×30(mm)<br>   | PRHMB50W6   | 650      | 50     | ✓  |  |
|        |                                                                                                              | PRHMB75W6   | 650      | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB100W6  | 650      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB150W6  | 650      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB200W6  | 650      | 200    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PRHMB300W6  | 650      | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB400W6  | 650      | 400    | ✓  |                                                                                       |
|        | E-74<br>94×35×30(mm)<br>  | PRHMB50W12  | 1200     | 50     | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB75W12  | 1200     | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB100W12 | 1200     | 100    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PRHMB150W12 | 1200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB200W12 | 1200     | 200    | ✓  |                                                                                       |
|        | E-56<br>108×62×30(mm)<br> | PRHMB300W12 | 1200     | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PRHMB400W12 | 1200     | 400    | ✓  |                                                                                       |
| PRFMB  | E-74<br>94×35×30(mm)<br>  | PRFMB50W6   | 650      | 50     | ✓  |  |
|        |                                                                                                              | PRFMB75W6   | 650      | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB100W6  | 650      | 100    | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB150W6  | 650      | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB200W6  | 650      | 200    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PRFMB300W6  | 650      | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB400W6  | 650      | 400    | ✓  |                                                                                       |
|        | E-74<br>94×35×30(mm)<br>  | PRFMB50W12  | 1200     | 50     | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB75W12  | 1200     | 75     | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB100W12 | 1200     | 100    | ✓  |                                                                                       |
|        | E-75<br>94×48×30(mm)<br>  | PRFMB150W12 | 1200     | 150    | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB200W12 | 1200     | 200    | ✓  |                                                                                       |
|        | E-56<br>108×62×30(mm)<br> | PRFMB300W12 | 1200     | 300    | ✓  |                                                                                       |
|        |                                                                                                              | PRFMB400W12 | 1200     | 400    | ✓  |                                                                                       |



京セラでは、産業のあらゆる分野で活躍するパワースタック・ユニット製品を提供しています。単相、三相用各種制御整流器回路、自冷型、風冷型、ヒューズ、アブソーバー付など様々なご要望にお応えいたします。

Kyocera provides power stack unit products that are actively used in all fields of industry. Various product types such as various control and rectifier circuits for single-phase or three-phase, self-cooling or forced air cooling type, and with fuse or absorber are provided to meet your requirements.

長年の実績により、高圧・大電流の扱いに必要なとなる回路設計、放熱設計、機構設計技術を有していますので、お客様のご要望に合わせたカスタム製品の設計製作も可能です。

ご要望の際は弊社営業担当までお問い合わせ下さい。

As we have technologies to design circuits, heat radiations, and mechanisms required for handling high voltage and high current, based on achievements in our long experience, we can design and manufacture custom products to meet your needs. If you have requests or any questions, please feel free to contact our sales representative.

## 事例 Examples

### カスタム開発 Customized model

#### 生産ライン用 高圧大電流インバータユニットの開発

#### Development of High voltage/ large current inverter unit for production line

##### お客様のニーズ Customer needs

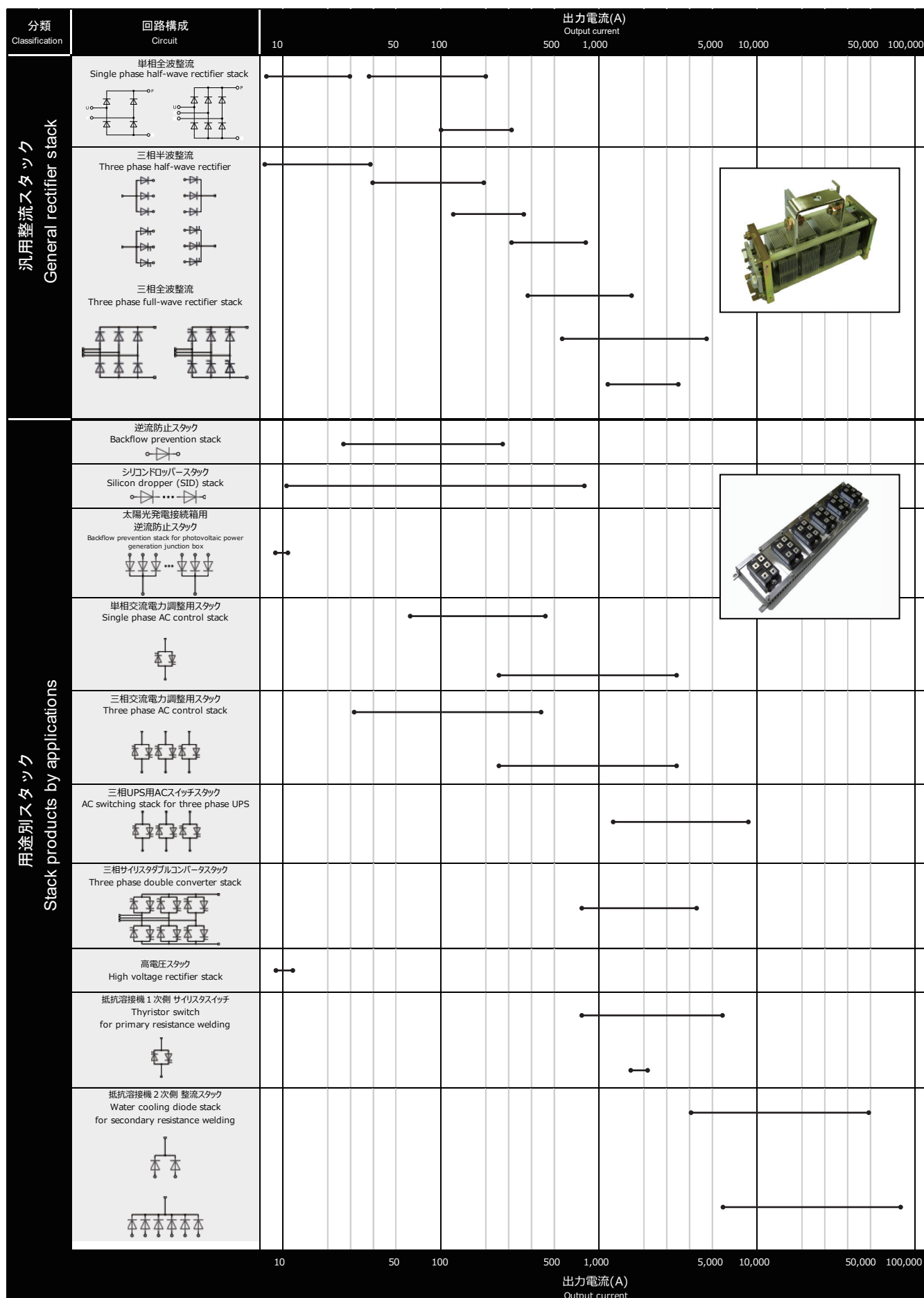
生産ラインに用いるため堅牢かつ充実した保護回路を備えたインバータを設計・製造してほしい

Example of request: want to design and manufacture inverter which carries great protection circuits and also very tough inverter for production line.

高圧・大電流実装技術を活かして堅牢なインバータユニットを実現  
Enable to manufacture tough inverter unit by using high voltage/ large current mounting technology.



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| アプリケーション<br>Application | 生産ライン用途モータ駆動<br>Motor drive for production line                                                                                                                                                                                                                                 |
| 特徴<br>Features          | 充実した保護回路を備えたIGBTインバータ、大容量IGBTモジュール搭載<br>Example of request: want to design and manufacture inverter which carries great protection circuits and also very tough inverter for production line.                                                                                   |
| 仕様<br>Specifications    | 入力電圧: ~DC650V 出力電圧: 440V、出力電流: AC200Arms<br>過電圧/過電流/短絡保護/過熱保護回路搭載、光絶縁インタフェース<br>Input voltage: ~DC 650V Output voltage: 440V, Output current: AC200Arms<br>Overvoltage/ Overcurrent/ Short-circuit protection/ Built-in overheat protection circuit, light insulation interface |



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We provides Power stack/unit products that matches customers request. Please feel free to contact us.

