

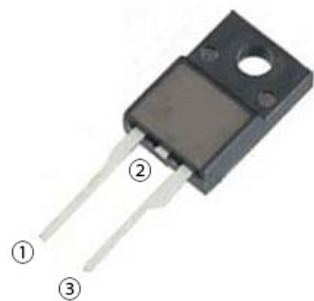
SF20L60U  
Fast Recovery Diodes  
600V, 20A

Feature

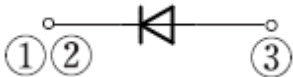
- Full Molded
- High Voltage
- Low Noise
- Dielectric Strength 2kV
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): FTO-220  
Package (JEITA Code): SC-91A



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

| Item                            | Symbol             | Conditions                                                  | Ratings    | Unit |
|---------------------------------|--------------------|-------------------------------------------------------------|------------|------|
| Storage temperrature            | Tstg               |                                                             | -55 to 150 | °C   |
| Junction temperature            | Tj                 |                                                             | 150        | °C   |
| Repetitive peak reverse voltage | V <sub>RRM</sub>   |                                                             | 600        | V    |
| Average forward current         | I <sub>F(AV)</sub> | 50Hz sine wave, Resistance load, Tc=68°C                    | 20         | A    |
| Surge forward current           | I <sub>FSM</sub>   | 50Hz sine wave, Non-repetitive 1 cycle, Peak value, Tj=25°C | 180        | A    |
| Dielectric strength             | Vdis               | Terminals to case, AC 1 minute                              | 2          | kV   |
| Mounting torque                 | TOR                | (Recommended torque : 0.3N·m)                               | 0.5        | N·m  |

※ :See the original Specifications

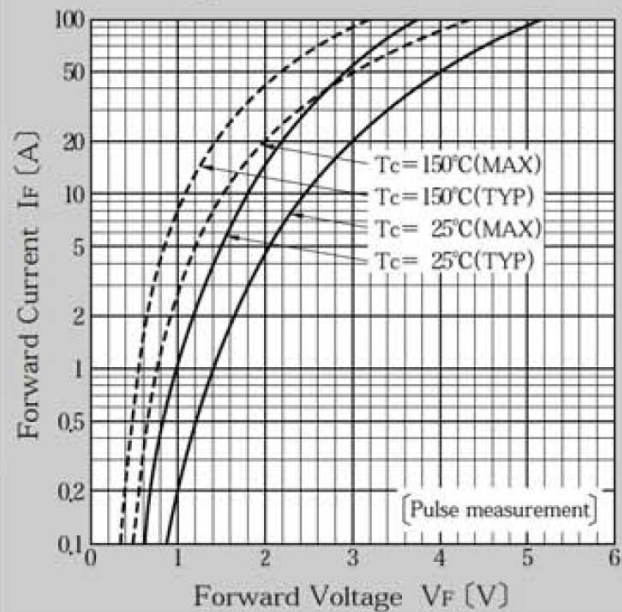
**Electrical Characteristics** (unless otherwise specified : Tc=25°C)

| Item                  | Symbol   | Conditions                 | Ratings |     |     | Unit |
|-----------------------|----------|----------------------------|---------|-----|-----|------|
|                       |          |                            | MIN     | TYP | MAX |      |
| Forward voltage       | $V_F$    | IF=20A, Pulse measurement  |         |     | 3   | V    |
| Reverse current       | $I_R$    | VR=600V, Pulse measurement |         |     | 25  | μA   |
| Reverse recovery time | trr      | IF=0.5A, IR=1A             |         |     | 35  | ns   |
| Total capacitance     | Ct       | f=1MHz, VR=10V             |         | 105 |     | pF   |
| Thermal resistance    | Rth(j-c) | Junction to case           |         |     | 1.3 | °C/W |

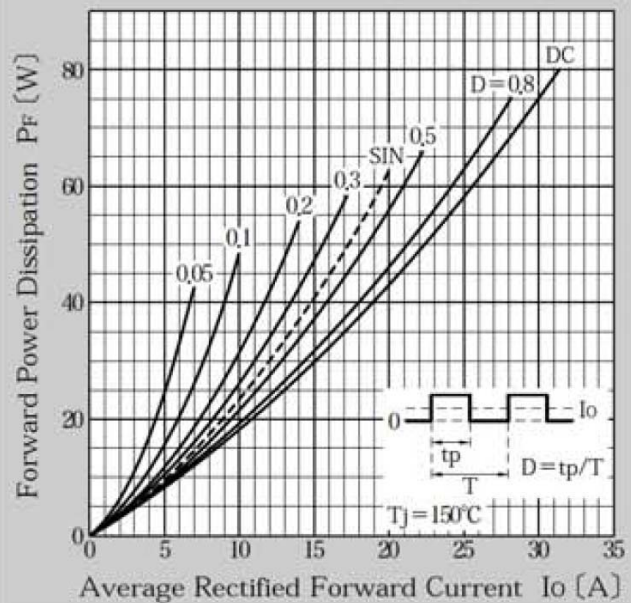
※ :See the original Specifications

## CHARACTERISTIC DIAGRAMS

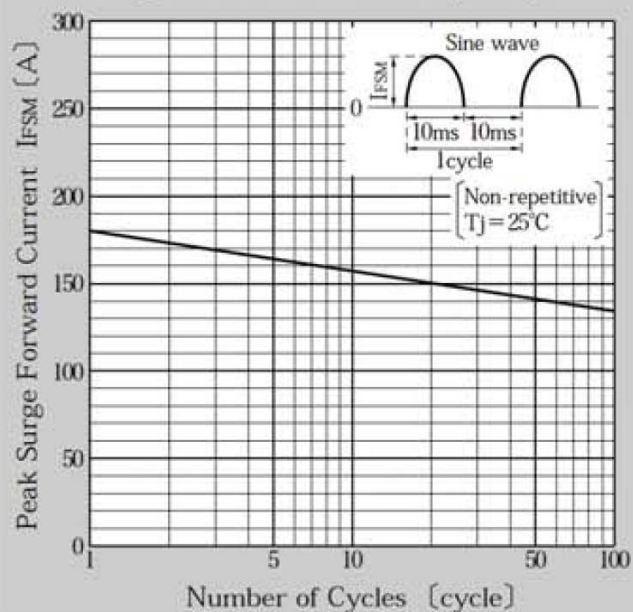
Forward Voltage



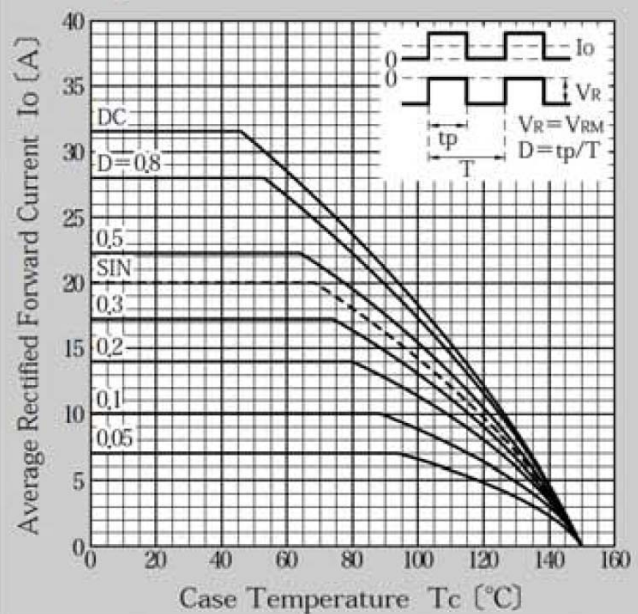
Forward Power Dissipation



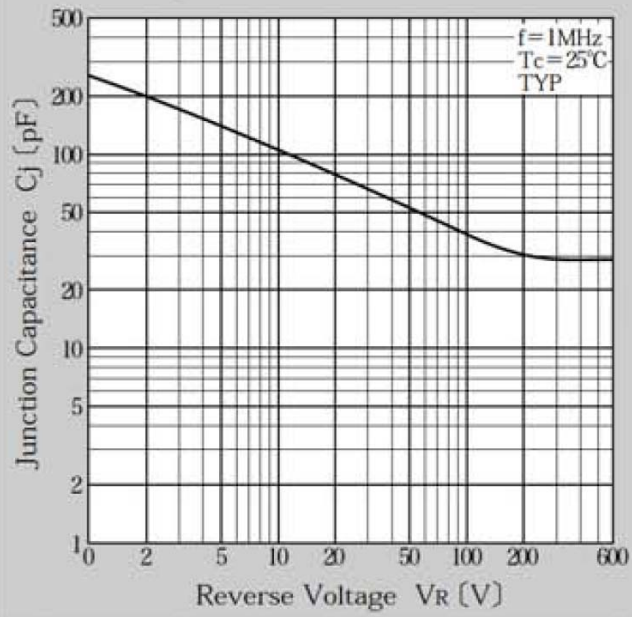
Peak Surge Forward Current Capability



Derating Curve  $T_c$ - $I_o$

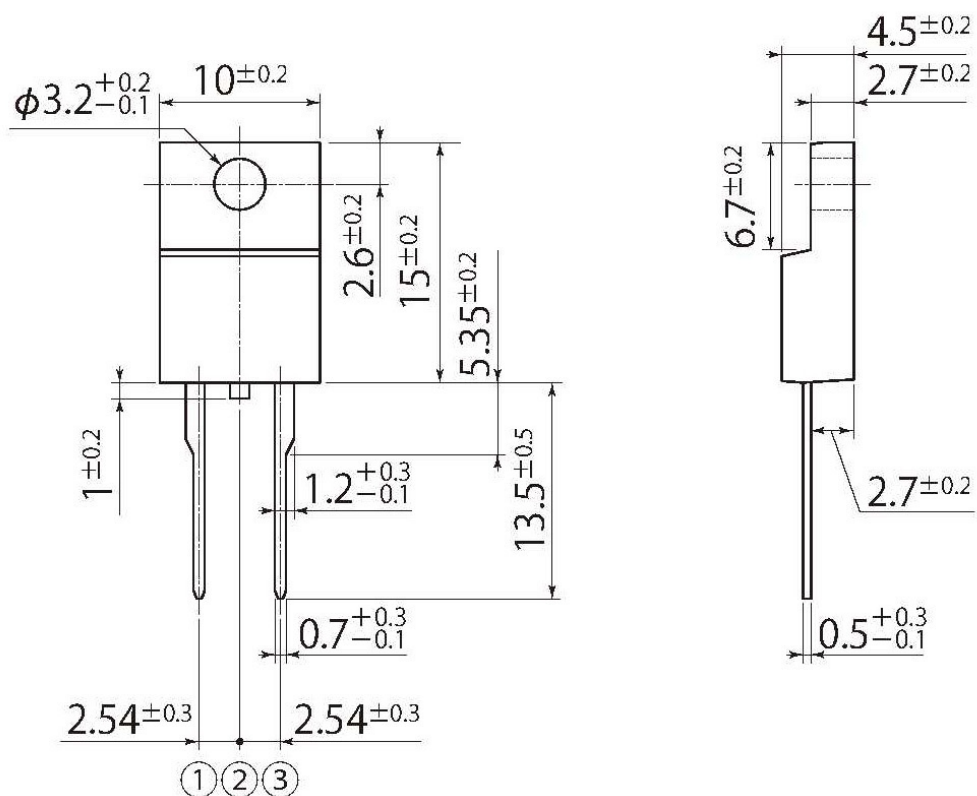


### Junction Capacitance



J1

|            |               |
|------------|---------------|
| JEDEC Code | —             |
| JEITA Code | SC-91A        |
| House Name | FTO-220(2pin) |



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  - 【Specific applications】  
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