

# Schottky Barrier Diode

## 20CQA06



DO-204AC (DO-15)

### ■特長 / Features

- ・ 低VF  
Low forward voltage drop
- ・ 高周波動作  
High frequency operation
- ・ RoHS指令対応、ハロゲンフリー  
RoHS compliant, Halogen-free

### ■アプリケーション / Applications

- ・ 二次側整流  
Secondary side rectification
- ・ DC/DCコンバータ  
DC/DC converters
- ・ 逆流防止  
Re-Circulating Diode

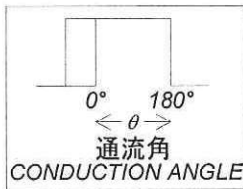
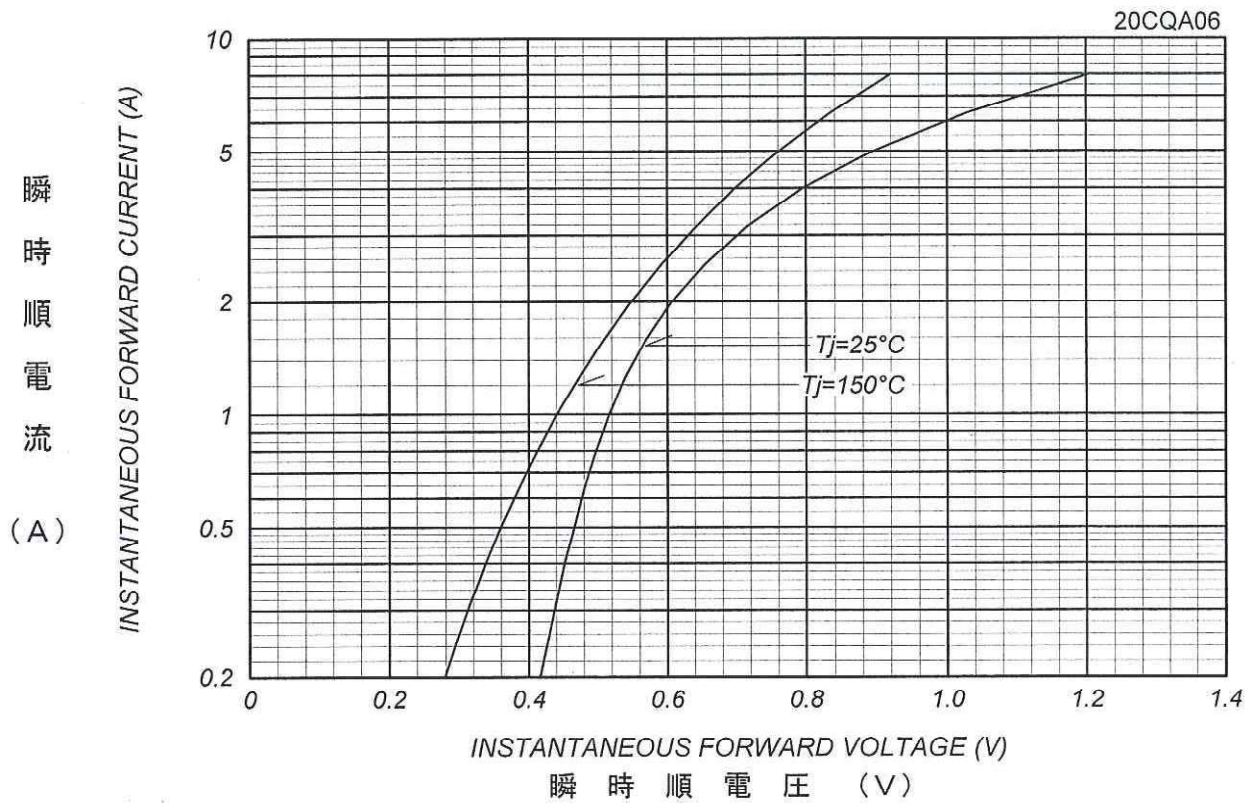
### ■最大定格 / Maximum ratings

| Parameter                                        | Symbol    | Conditions                                                      | Limits          | Unit               |
|--------------------------------------------------|-----------|-----------------------------------------------------------------|-----------------|--------------------|
| 繰り返しピーク逆電圧<br>Repetitive Peak Reverse Voltage    | $V_{RRM}$ |                                                                 | 60              | V                  |
| 平均整流電流<br>Average Rectified Output Current       | $I_O$     | $T_I=117^{\circ}\text{C}$                                       | 2.0             | A                  |
| サージ順電流<br>Surge Forward Current                  | $I_{FSM}$ | 50Hz 正弦半波、1サイクル、非繰り返し<br>Half Sine Wave, 1cycle, Non-repetitive | 45              | A                  |
| 動作接合温度範囲<br>Operating Junction Temperature Range | $T_{jw}$  |                                                                 | $-40 \sim +150$ | $^{\circ}\text{C}$ |
| 保存温度範囲<br>Storage Temperature Range              | $T_{stg}$ |                                                                 | $-40 \sim +150$ | $^{\circ}\text{C}$ |

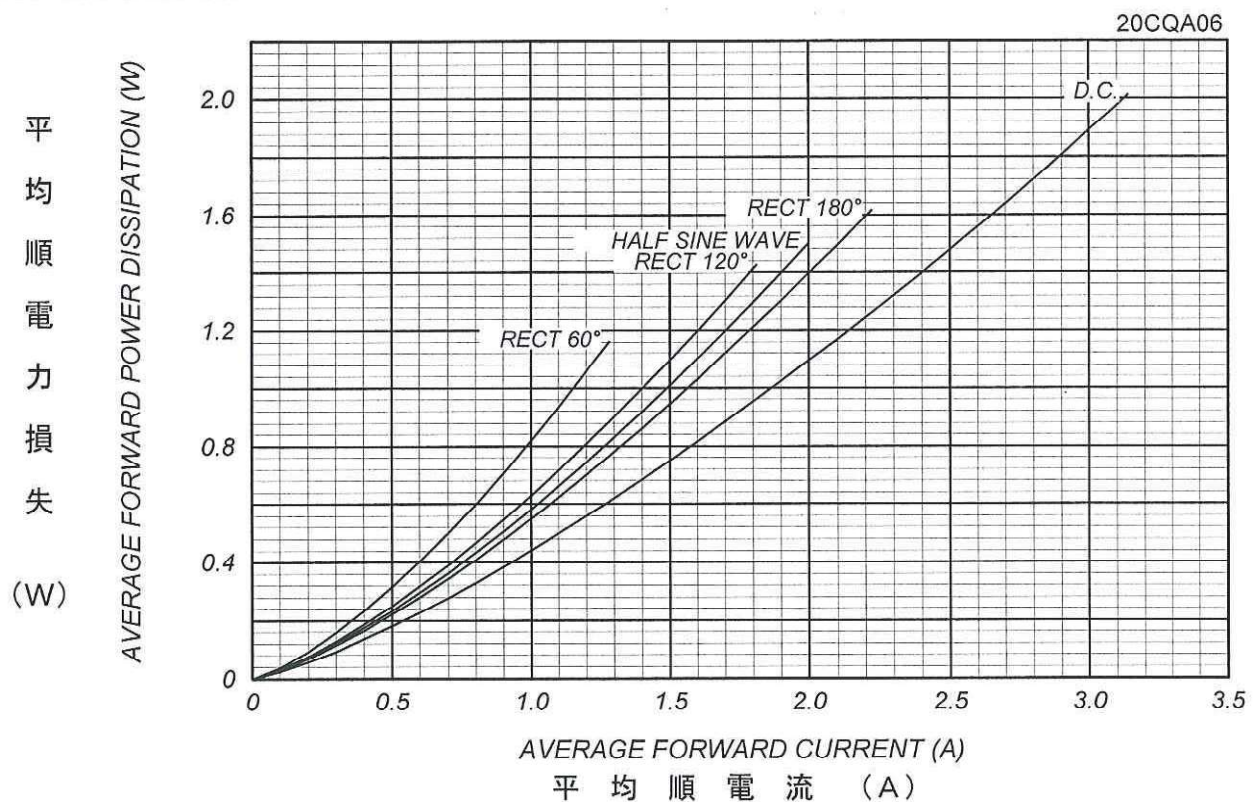
### ■電気的特性 / Electrical characteristics

| Parameter                      | Symbol   | Conditions                                  | Min. | Typ. | Max. | Unit                        |
|--------------------------------|----------|---------------------------------------------|------|------|------|-----------------------------|
| ピーク逆電流<br>Peak Reverse Current | $I_{RM}$ | $V_{RM}=V_{RRM}$ $T_j=25^{\circ}\text{C}$   | -    | -    | 3.00 | mA                          |
| ピーク順電圧<br>Peak Forward Voltage | $V_{FM}$ | $I_{FM}=2\text{A}$ $T_j=25^{\circ}\text{C}$ | -    | -    | 0.60 | V                           |
| 熱抵抗<br>Thermal Resistance      | $R_{th}$ | 接合部ーリード間<br>Junction to Lead                | -    | -    | 17.0 | $^{\circ}\text{C}/\text{W}$ |

順電圧特性  
FORWARD CURRENT VS. VOLTAGE

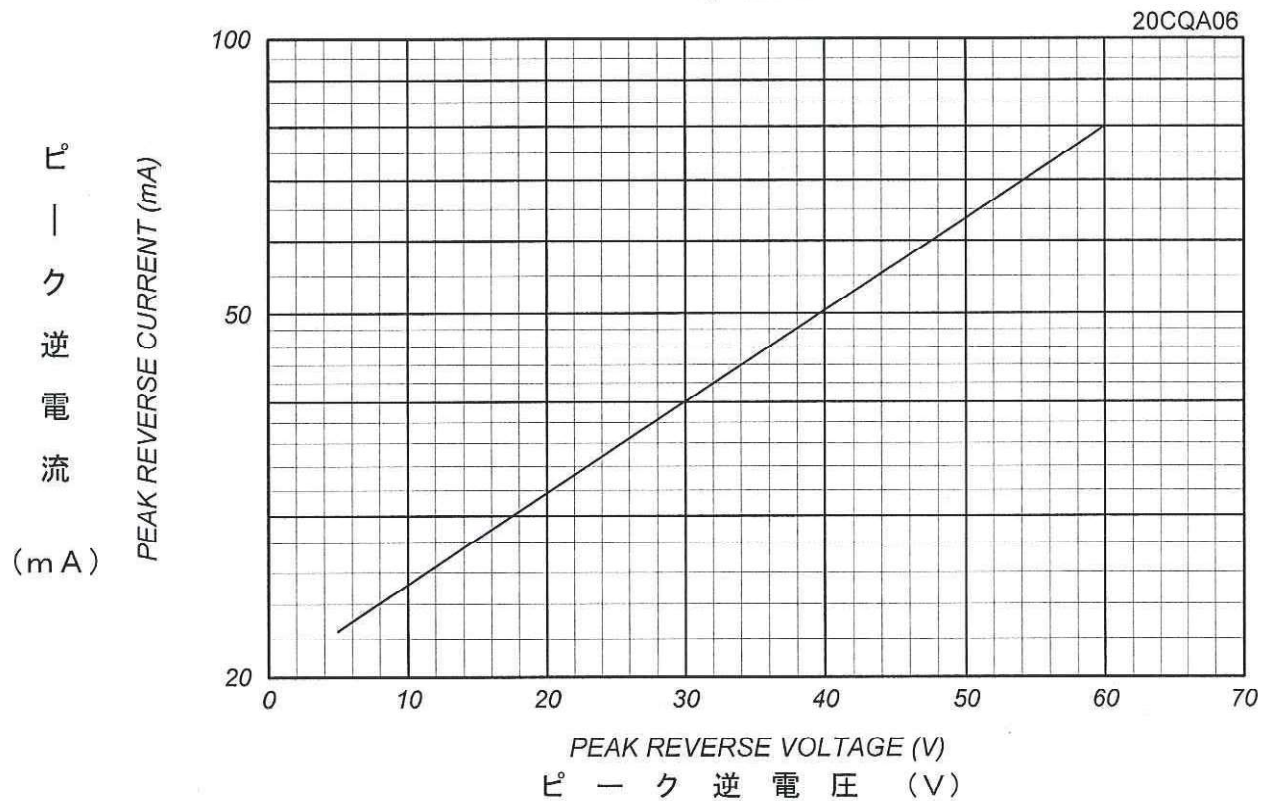


平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION

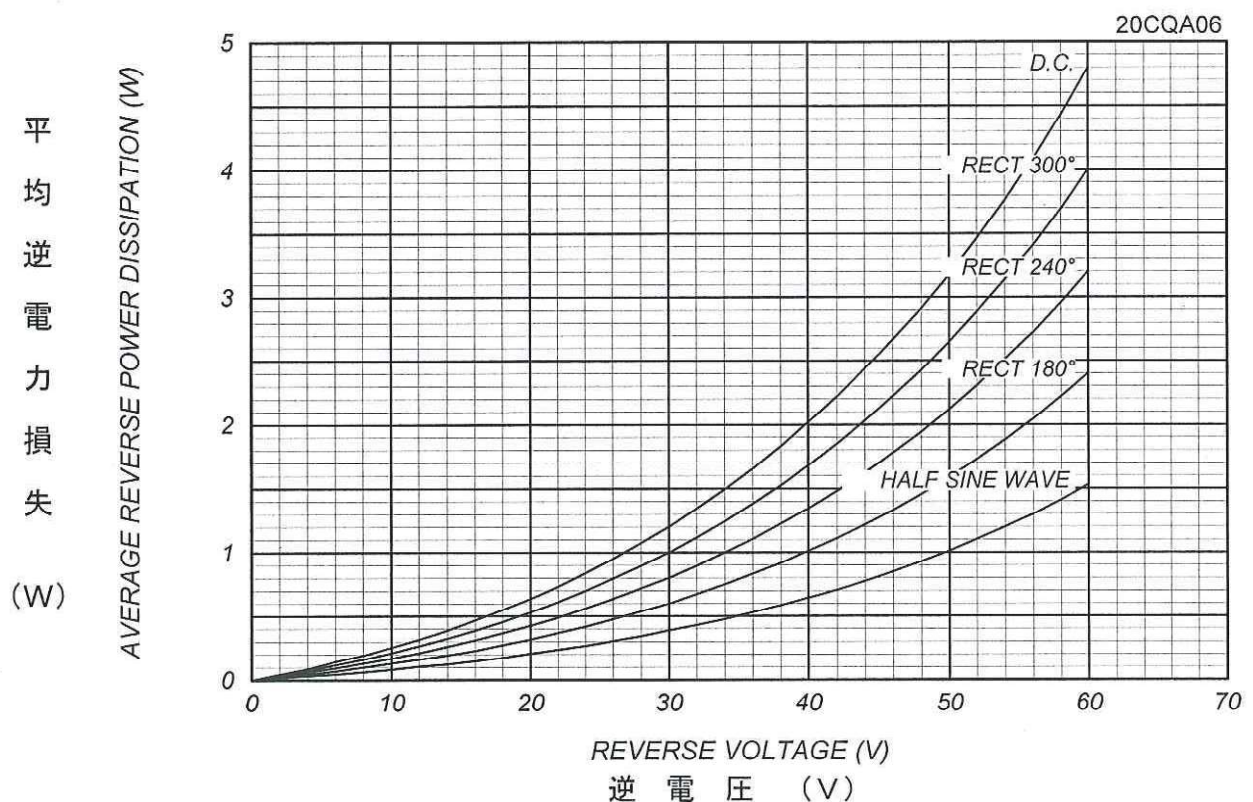


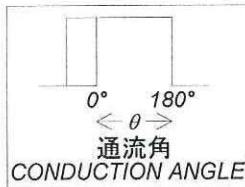
ピーク逆電流 — ピーク逆電圧特性  
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

$T_j = 150^\circ\text{C}$



平均逆電力損失  
AVERAGE REVERSE POWER DISSIPATION





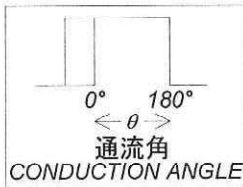
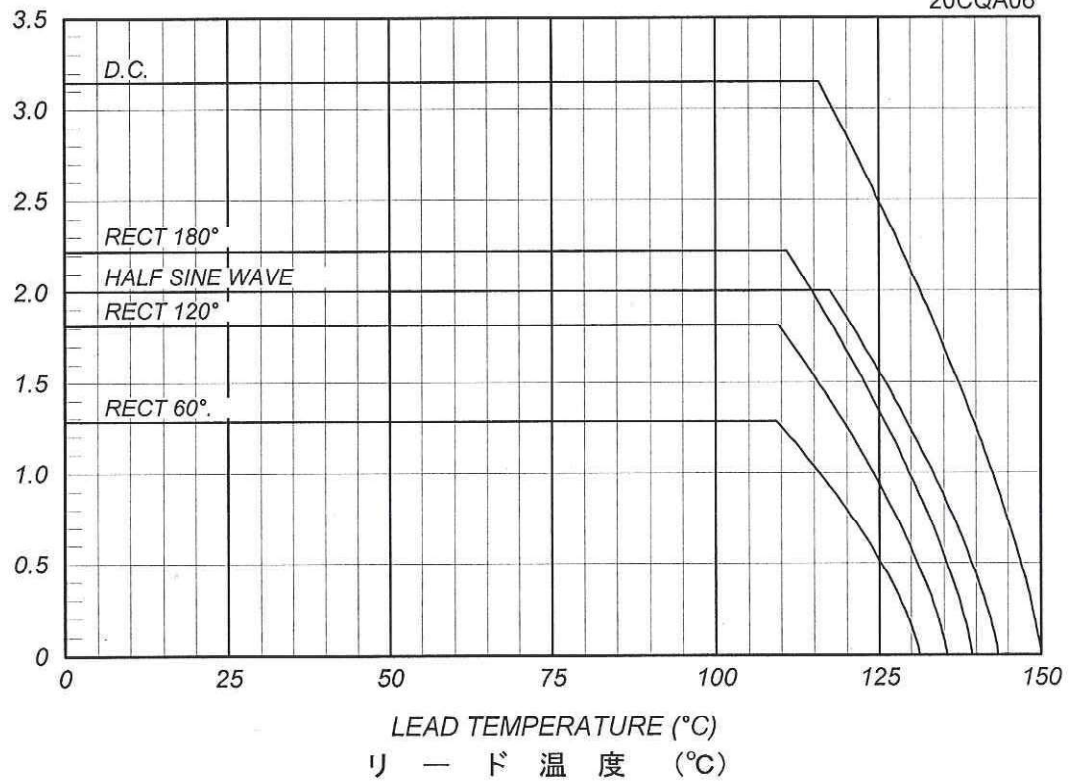
平均順電流－リード温度定格  
AVERAGE FORWARD CURRENT VS. LEAD TEMPERATURE

$V_{RM}=30V$

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平均順電流  
(A)

AVERAGE FORWARD CURRENT (A)



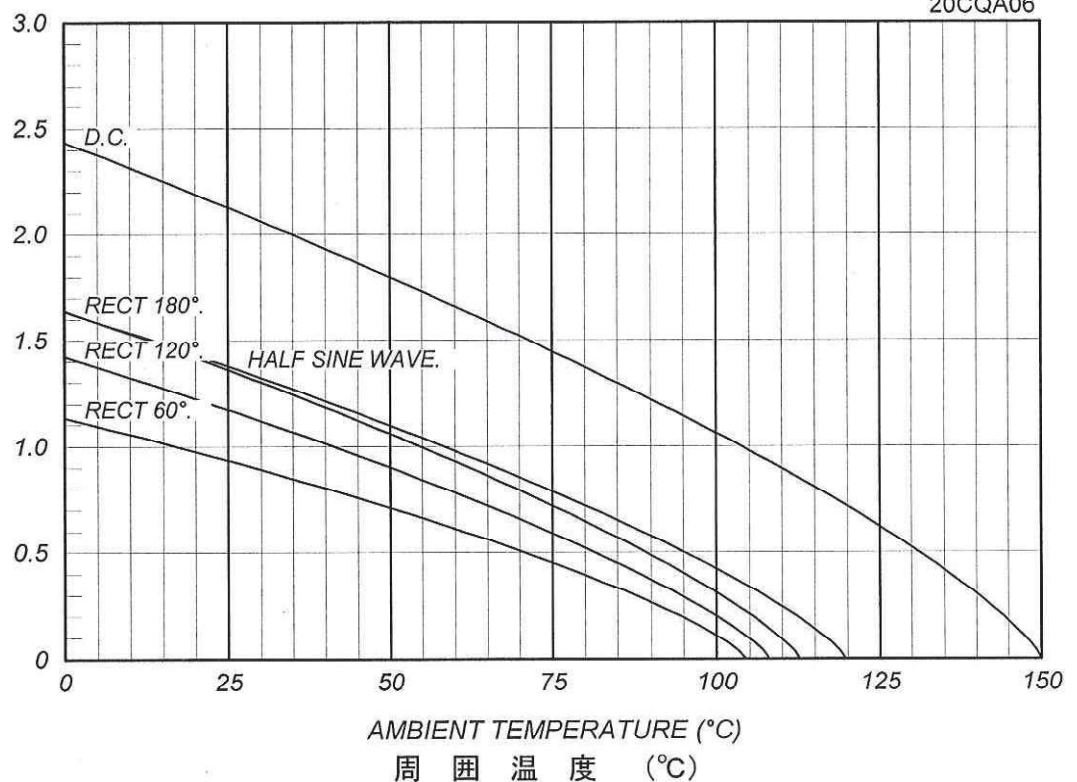
平均順電流－周囲温度定格  
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board,  $V_{RM}=30V$

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平均順電流  
(A)

AVERAGE FORWARD CURRENT (A)



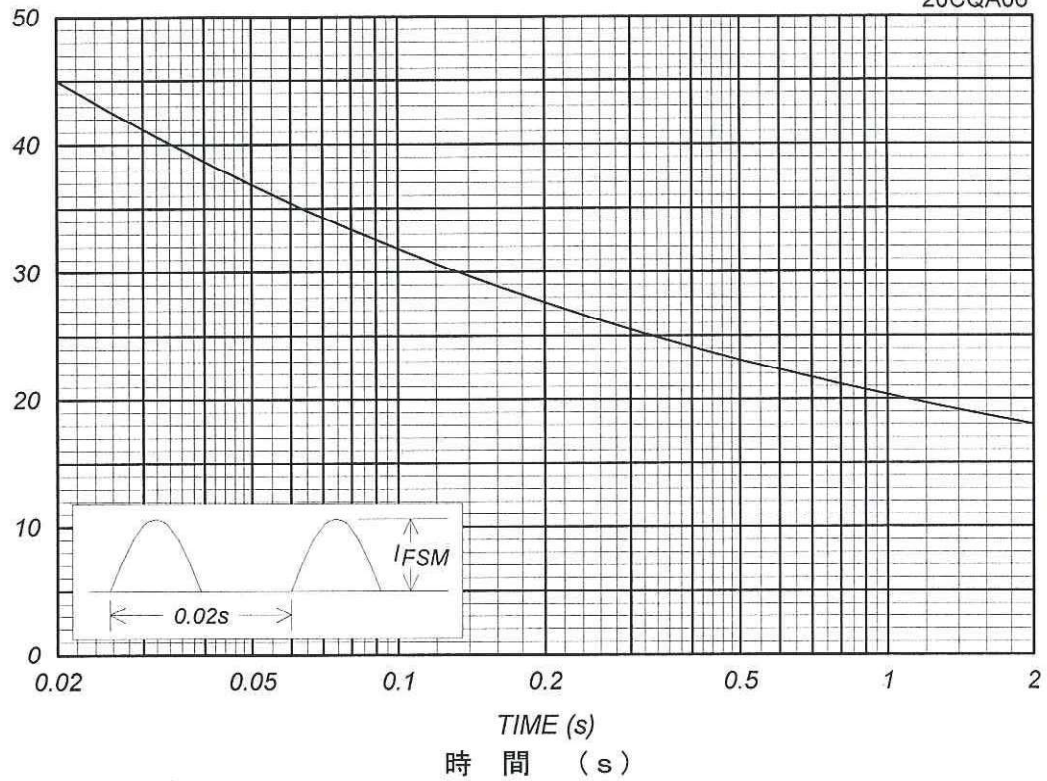
# サージ順電流定格 SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load

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サ  
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順  
電  
流  
  
(A)

SURGE FORWARD CURRENT (A)



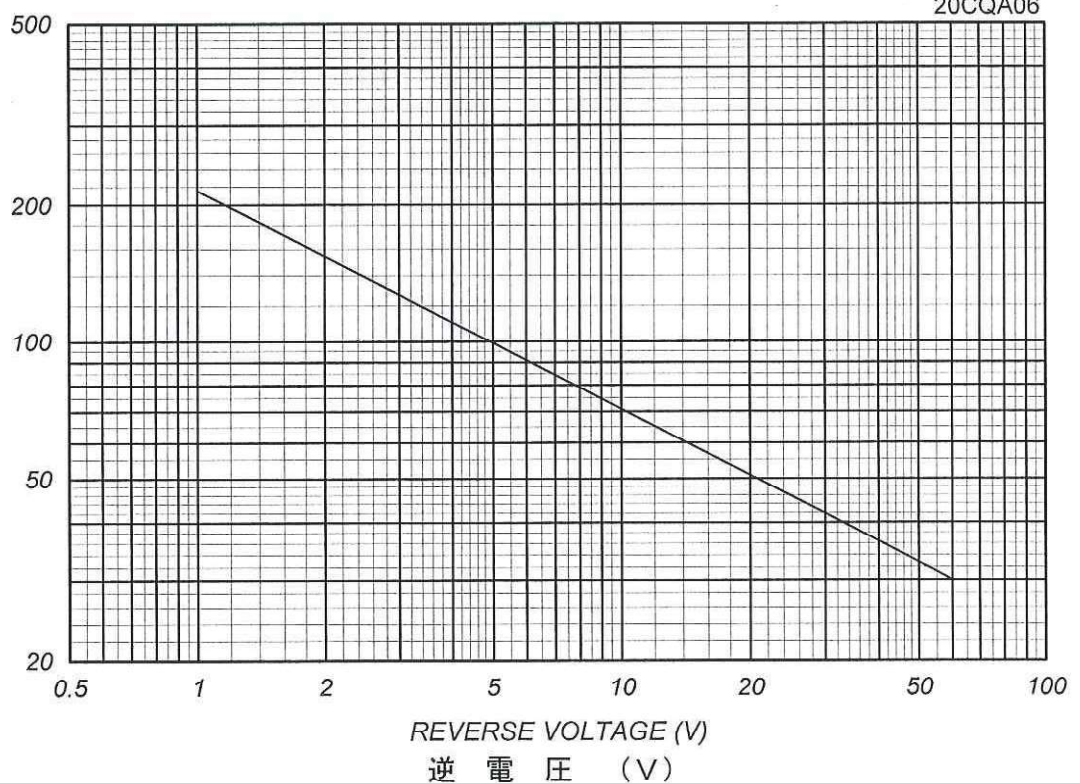
## 接合容量特性 JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25°C, Vm=20mV<sub>RMS</sub>, f=100kHz, Typical Value

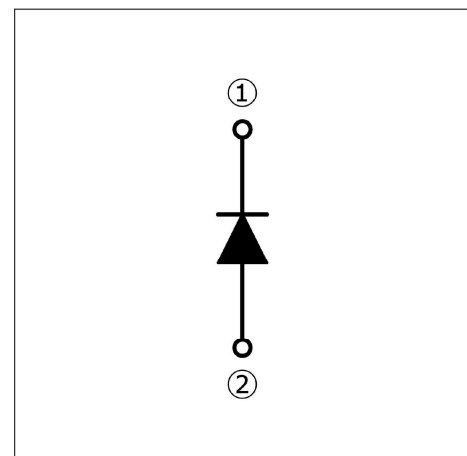
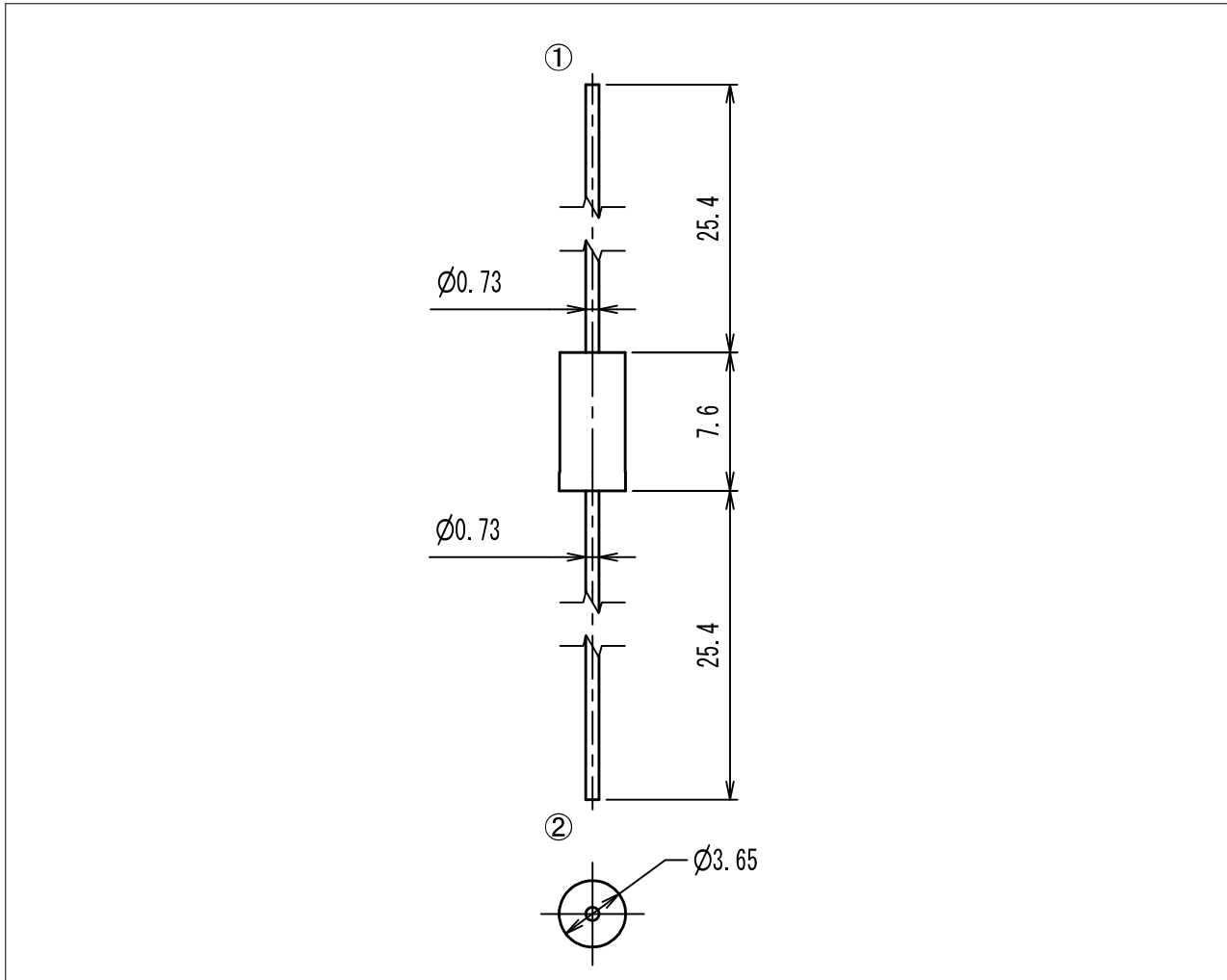
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接  
合  
容  
量  
  
(pF)

JUNCTION CAPACITANCE (pF)



**DO-204AC (DO-15)**



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【特別用途】

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【特定用途】

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【Specific applications】

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