

## ショットキーバリアダイオード

### SCHOTTKY BARRIER DIODE

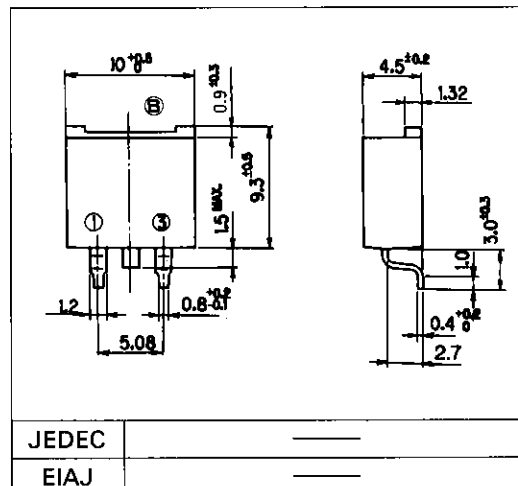
#### ■特長：Features

- 表面実装が可能  
Surface mount device.
- 低 $V_F$   
Low  $V_F$
- スイッチングスピードが非常に速い  
Super high speed switching.
- プレーナー技術による高信頼性  
High reliability by planer design.

#### ■用途：Applications

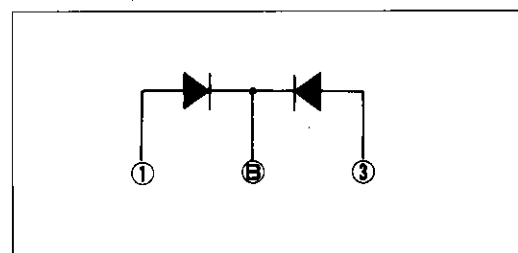
- 高速電力スイッチング  
High speed power switching.

#### ■外形寸法：Outline Drawings



#### ■電極接続

##### Connection Diagram



#### ■定格と特性：Maximum Ratings and Characteristics

##### ●絶対最大定格：Absolute Maximum Ratings

| Items                                              | Symbols   | Test Conditions                                                       | Ratings         | Units            |
|----------------------------------------------------|-----------|-----------------------------------------------------------------------|-----------------|------------------|
| ピーク繰り返し逆電圧<br>Repetitive Peak Reverse Voltage      | $V_{RRM}$ |                                                                       | 40              | V                |
| ピーク非繰り返し逆電圧<br>Non-Repetitive Peak Reverse Voltage | $V_{RSM}$ | $t_w = 500\text{ns}$ , $\text{duty} = 1/10$                           | 48              | V                |
| 平均出力電流<br>Average Output Current                   | $I_O$     | 矩形波, $\text{duty} = 1/2$ , $T_c = 97^\circ\text{C}$<br>Rectangle wave | 10*             | A                |
| サージ電流<br>Surge Current                             | $I_{FSM}$ | 正弦波 Sine wave<br>10ms 定格負荷状態より                                        | 120             | A                |
| 接合温度<br>Operating Junction Temperature             | $T_j$     |                                                                       | $-40 \sim +125$ | $^\circ\text{C}$ |
| 保存温度<br>Storage Temperature                        | $T_{stg}$ |                                                                       | $-40 \sim +125$ | $^\circ\text{C}$ |

\* センタータップ平均出力電流

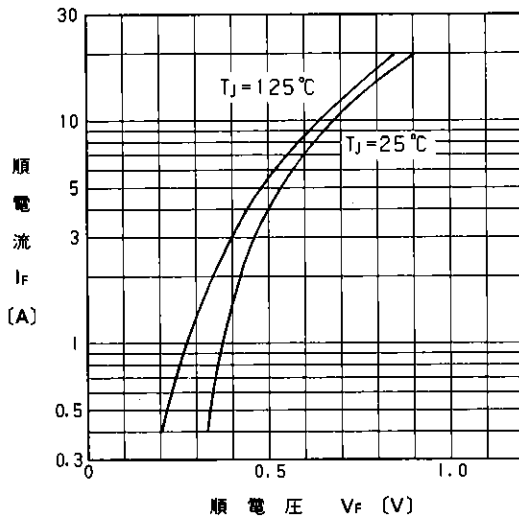
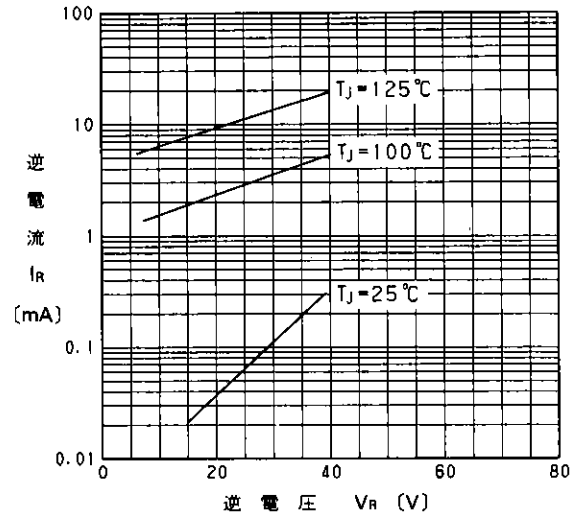
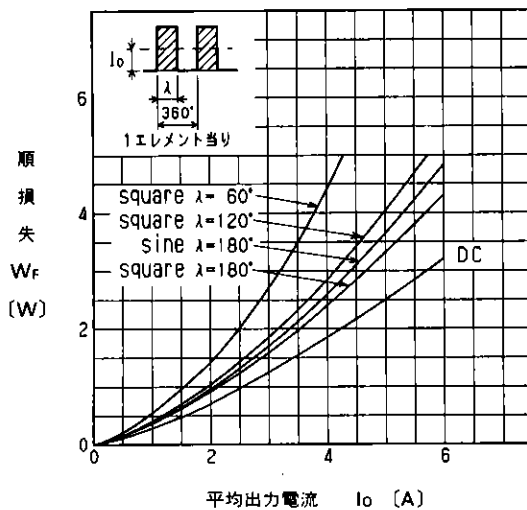
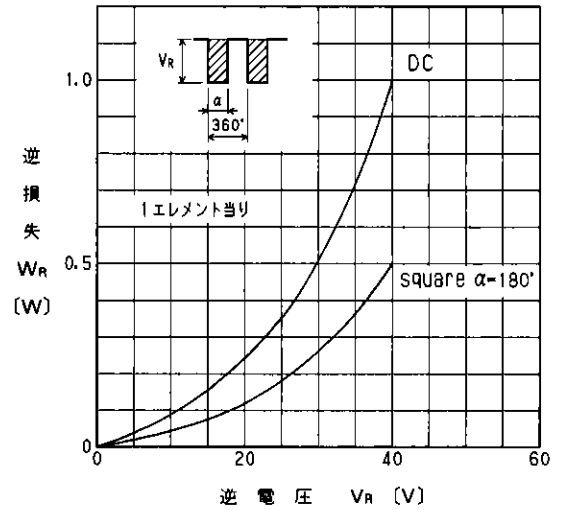
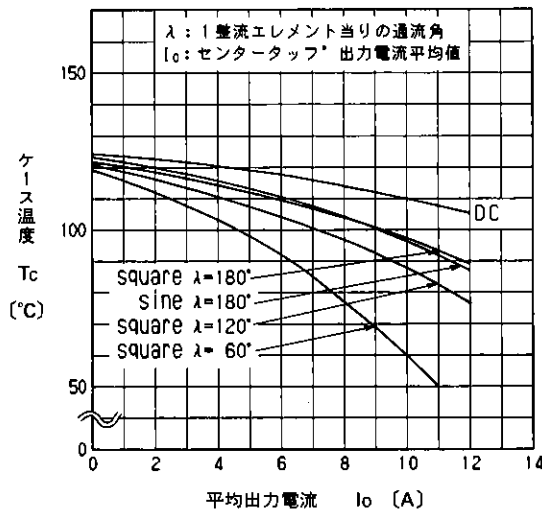
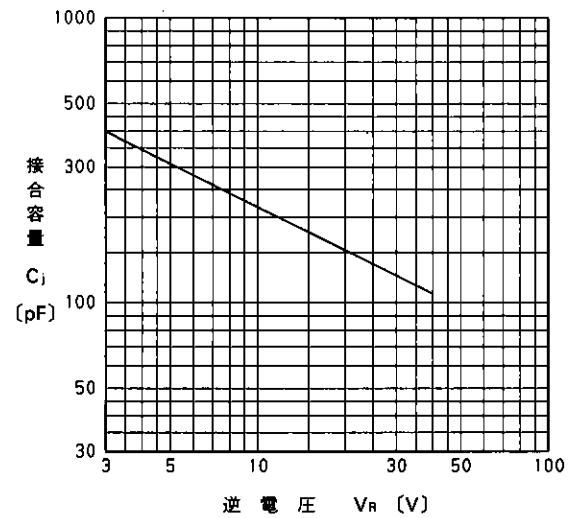
\* average forward current of centertap full wave connection

##### ●電気的特性(特に指定がない限り周囲温度 $T_a = 25^\circ\text{C}$ とする)

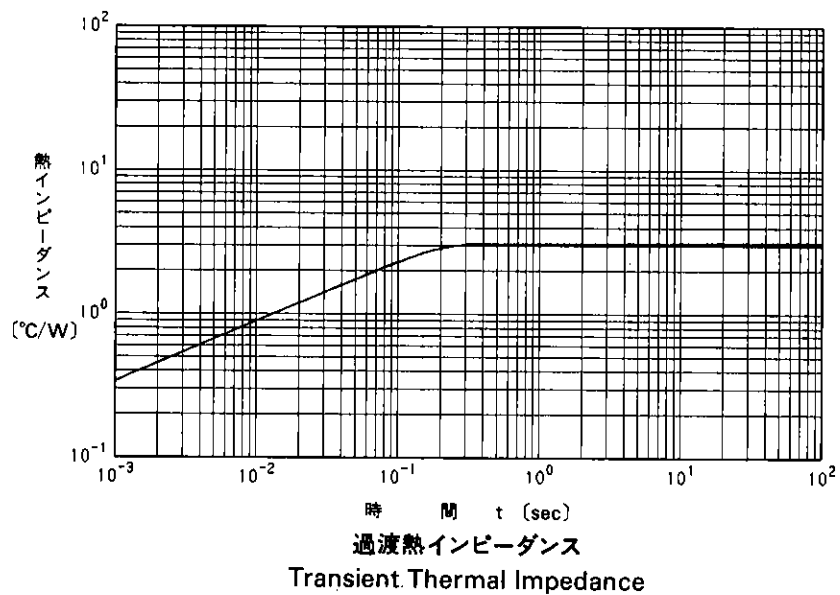
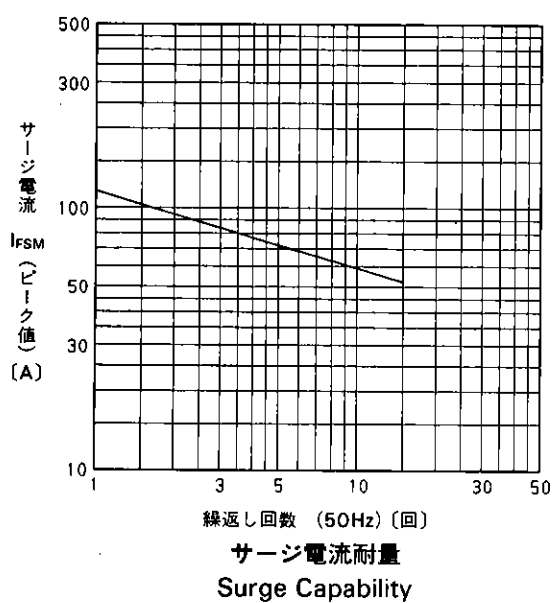
Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless otherwise specified)

| Items                       | Symbols       | Conditions                  | Max. | Units              |
|-----------------------------|---------------|-----------------------------|------|--------------------|
| 順電圧<br>Forward Voltage Drop | $V_{FM}$      | $I_F = 4\text{A}$           | 0.55 | V                  |
| 逆電流<br>Reverse Current      | $I_{RRM}$     | $V_R = V_{RRM}$             | 5    | mA                 |
| 熱抵抗<br>Thermal Resistance   | $R_{th(j-c)}$ | 接合・ケース間<br>Junction to case | 3.0  | $^\circ\text{C/W}$ |

## ■特性曲線：Characteristics

順特性（代表特性）  
Forward Characteristics逆特性（代表特性）  
Reverse Characteristics順損失特性  
Forward Power Dissipation逆損失特性  
Reverse Power Dissipation出力電流—ケース温度特性  
Output Current—Case Temperature

A



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