

## ショットキーバリアダイオード

## SCHOTTKY BARRIER DIODE

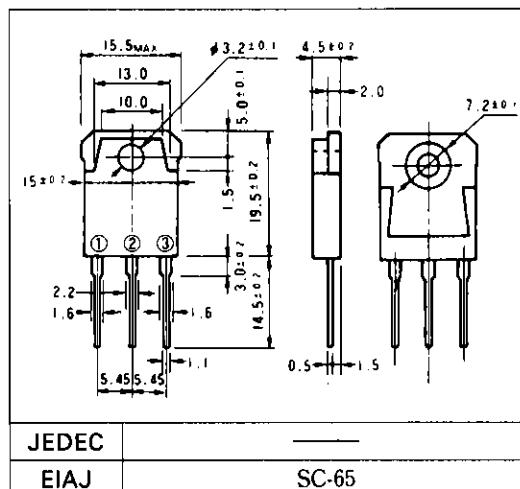
## ■特長：Features

- 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

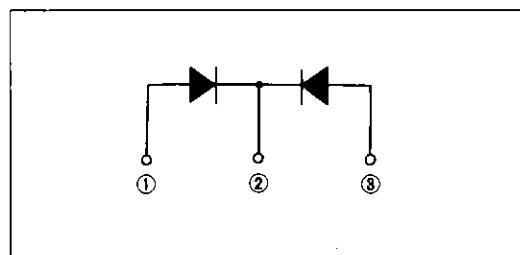
- 高速電力スイッチング  
High speed power switching.

## ■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   | Conditions  | Ratings    | Units |
|--|-----------|---|------------|-------|
| ピーク繰り返し逆電圧<br>Repetitive Peak Reverse Voltage      | $V_{RRM}$ |   | 20         | V     |
| ピーク非繰り返し逆電圧<br>Non-Repetitive Peak Reverse Voltage | $V_{RSM}$ |   | 24         | V     |
| 平均出力電流<br>Average Output Current                   | $I_o$     | 矩形波, duty = 1/2, $T_c = 85^\circ\text{C}$<br>Rectangle wave | 30*        | A     |
| サージ電流<br>Surge Current                             | $I_{FSM}$ | 正弦波 Sine wave<br>10ms 定格負荷より                                | 250        | A     |
| 接合温度<br>Operating Junction Temperature             | $T_j$     |   | -40 ~ +125 | °C    |
| 保存温度<br>Storage Temperature                        | $T_{stg}$ |   | -40 ~ +125 | °C    |

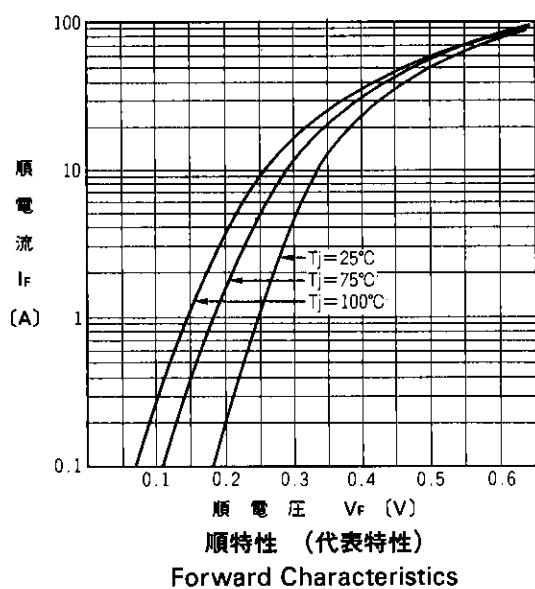
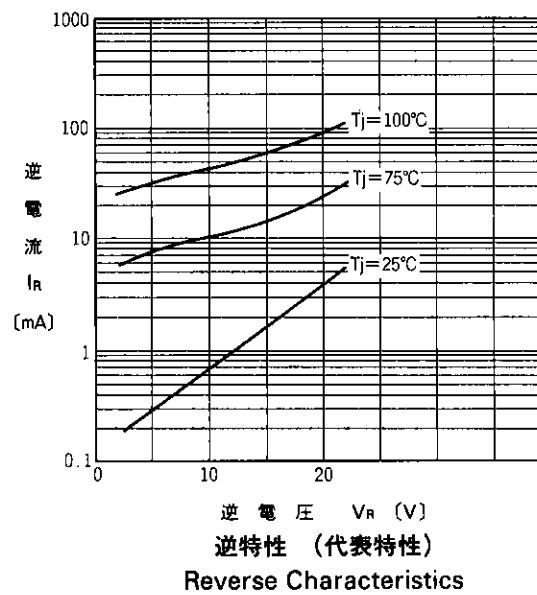
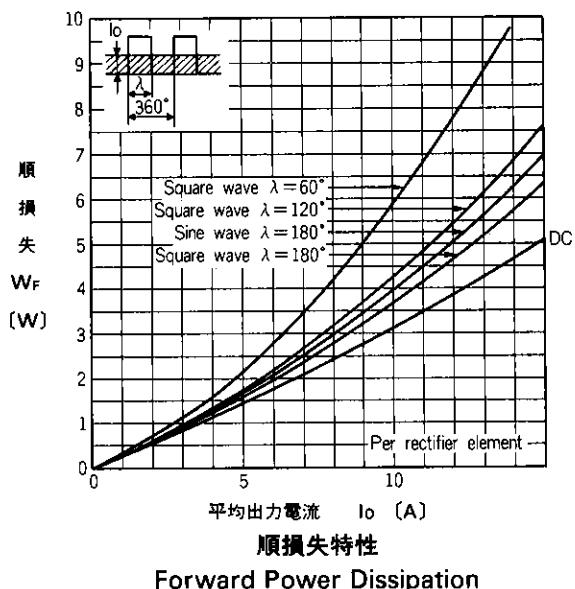
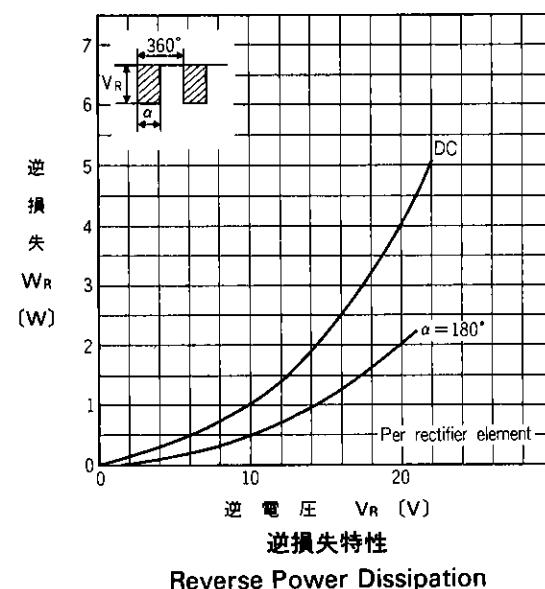
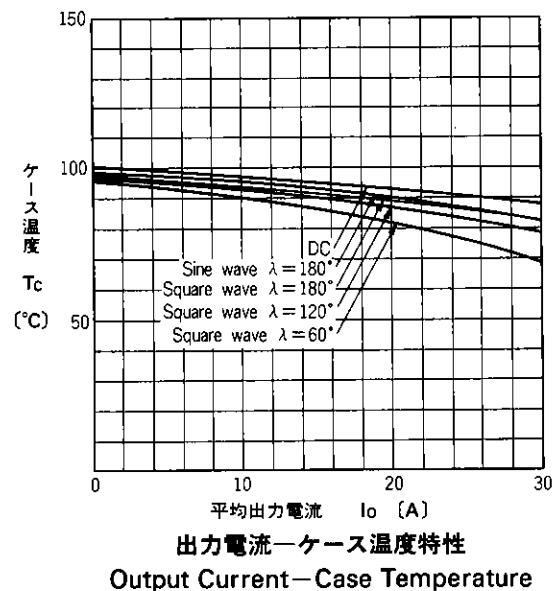
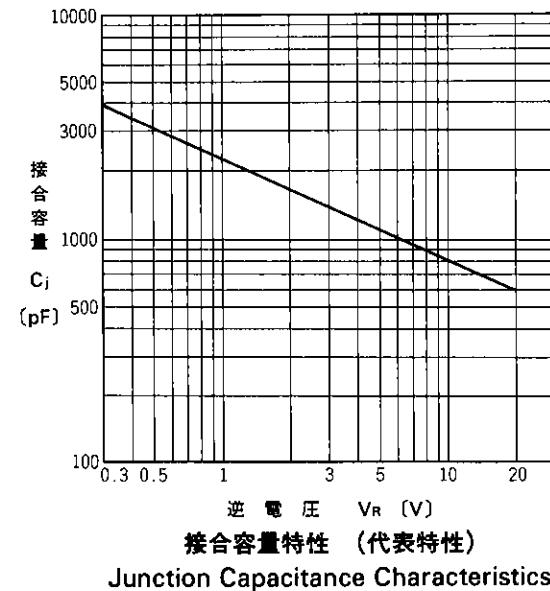
\* センタータップ平均出力電流

\* average forward current of centertap full wave connection

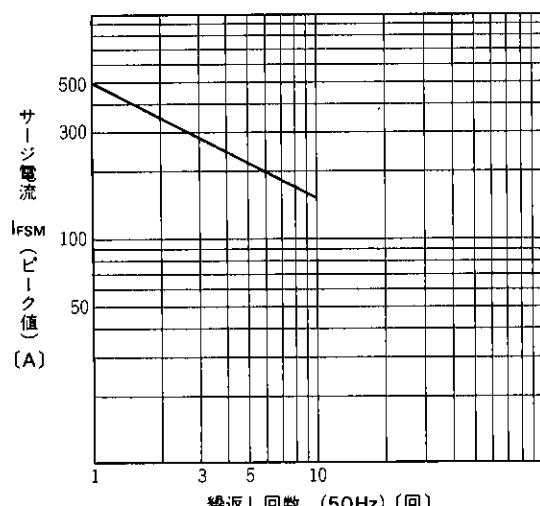
●電気的特性(特に指定がない限り周囲温度 $T_a = 25^\circ\text{C}$ とする)Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless otherwise specified)

| Items                       | Symbols       | Conditions                  | Max. | Units |
|-----------------------------|---------------|-----------------------------|------|-------|
| 順電圧<br>Forward Voltage Drop | $V_{FM}$      | $I_{FM} = 12.5\text{A}$     | 0.4  | V     |
| 逆電流<br>Reverse Current      | $I_{RRM}$     | $V_R = V_{RRM}$             | 50   | mA    |
| 熱抵抗<br>Thermal Resistance   | $R_{th(j-c)}$ | 接合・ケース間<br>Junction to case | 1.2  | °C/W  |

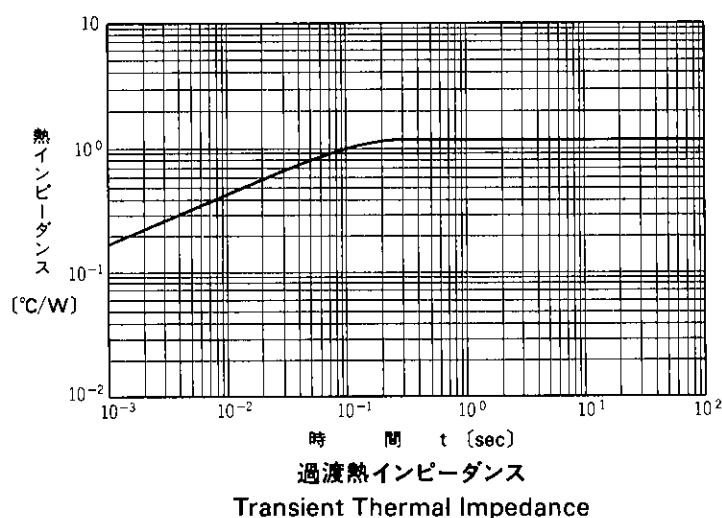
## ■特性曲線 : Characteristics

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接合容量特性 (代表特性)  
Junction Capacitance Characteristics

A



サージ電流耐量  
Surge Capability



過渡热インピーダンス  
Transient Thermal Impedance

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