

## ショットキーバリアダイオード

### SCHOTTKY BARRIER DIODE

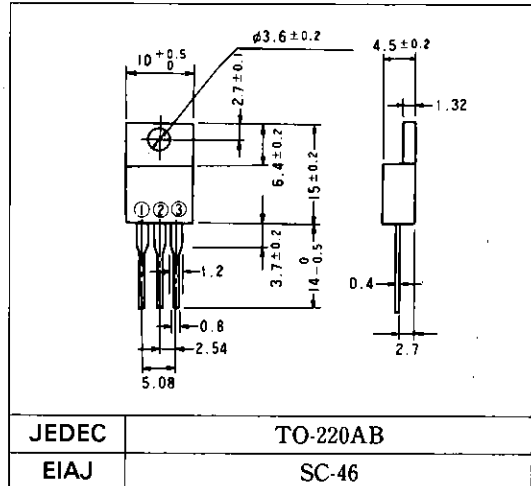
#### ■特長：Features

- 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

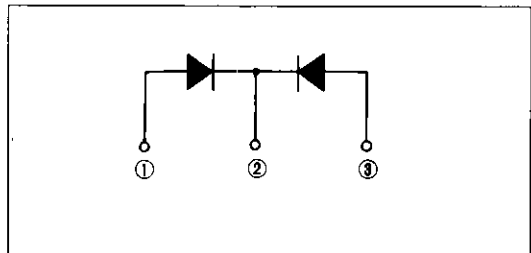
- 高速電力スイッチング  
High speed power switching.

#### ■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      | $V_{RRM}$ |                                                            | 90              | V          |
| ピーク非繰り返し逆電圧<br>Non-Repetitive Peak Reverse Voltage | $V_{RSM}$ | $tw = 500ns, duty = \frac{1}{40}$                          | 100             | V          |
| 平均出力電流<br>Average Output Current                   | $I_o$     | 方形波, $duty = \frac{1}{2}, T_c = 95^\circ C$<br>Square wave | 5.0*            | A          |
| サージ電流<br>Surge Current                             | $I_{FSM}$ | 正弦波 Sine Wave<br>10ms                                      | 60              | A          |
| 接合温度<br>Operating Junction Temperature             | $T_j$     |                                                            | $-40 \sim +125$ | $^\circ C$ |
| 保存温度<br>Storage Temperature                        | $T_{stg}$ |                                                            | $-40 \sim +125$ | $^\circ C$ |

\* センタータップ平均出力電流

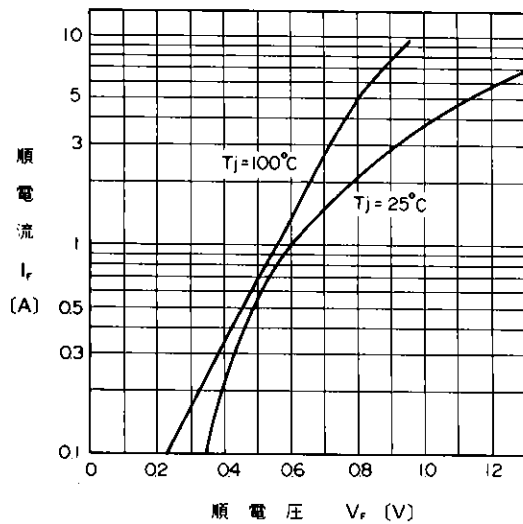
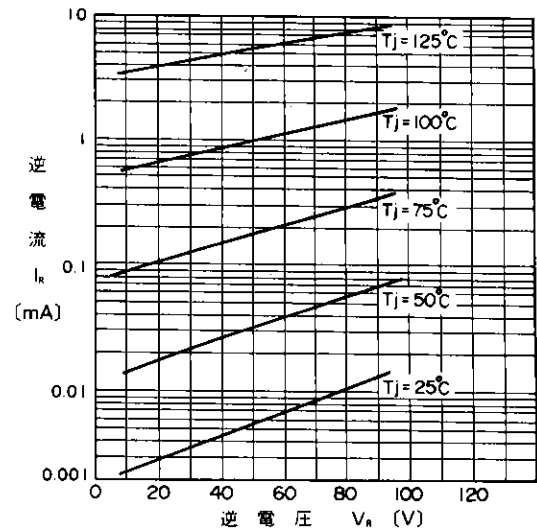
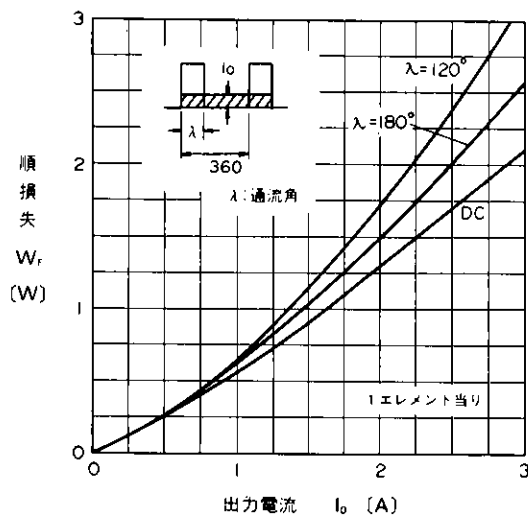
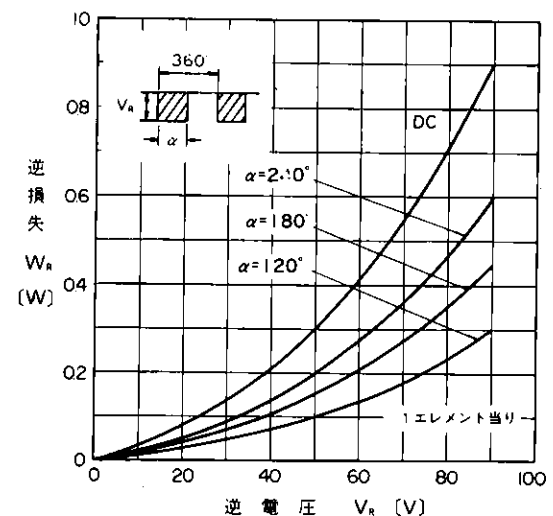
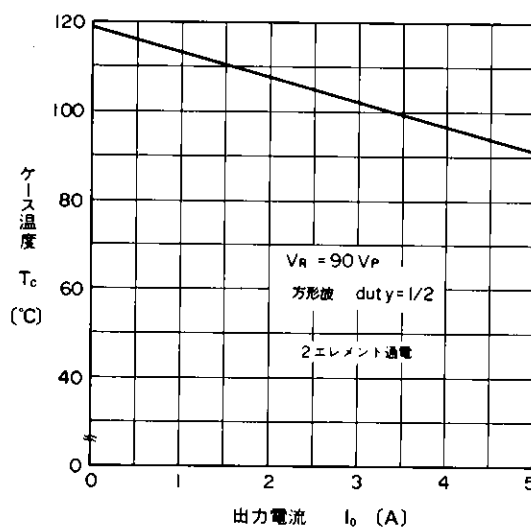
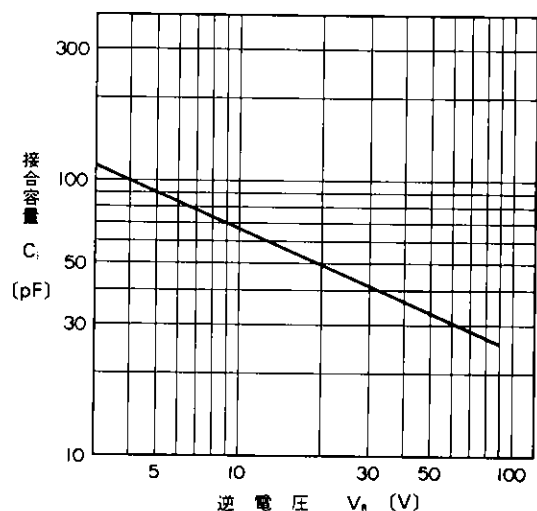
\* average forward current of centertap full wave connection

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

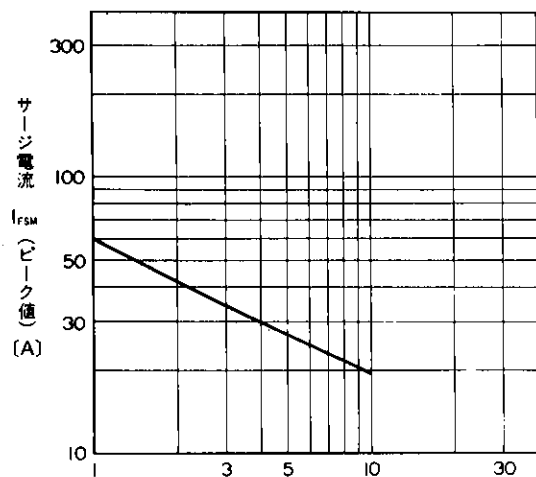
Electrical Characteristics ( $T_a = 25^\circ C$  Unless otherwise specified)

| Items                       | Symbols       | Conditions                  | Max. | Units        |
|-----------------------------|---------------|-----------------------------|------|--------------|
| 順電圧<br>Forward Voltage Drop | $V_{FM}$      | $I_{FM} = 2.0A$             | 0.9  | V            |
| 逆電流<br>Reverse Current      | $I_{RRM}$     | $V_R = V_{RRM}$             | 2.0  | mA           |
| 熱抵抗<br>Thermal Resistance   | $R_{th(j-c)}$ | 接合・ケース間<br>Junction to case | 5.0  | $^\circ C/W$ |

## ■特性曲線：Characteristics

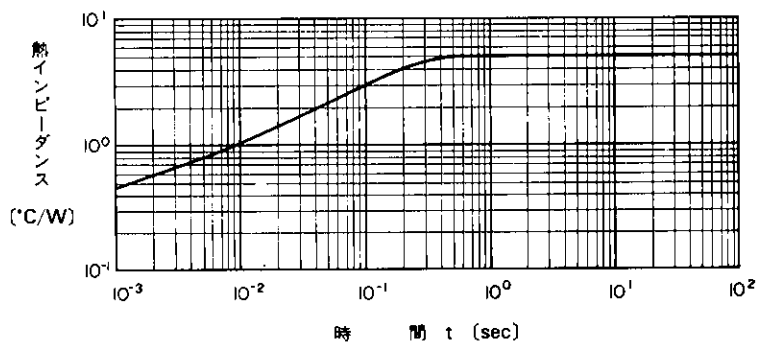
順特性 (代表特性)  
Forward Characteristics逆特性 (代表特性)  
Reverse Characteristics順損失特性  
Forward Power Dissipation逆損失特性  
Reverse Power Dissipation出力電流—ケース温度特性  
Output Current-Case Temperature接合容量特性 (代表特性)  
Junction Capacitance Characteristics

A



繰返し回数 (50Hz) (回)

サージ電流耐量  
Surge Capability



時間 t (sec)

過渡熱インピーダンス  
Transient Thermal Impedance

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