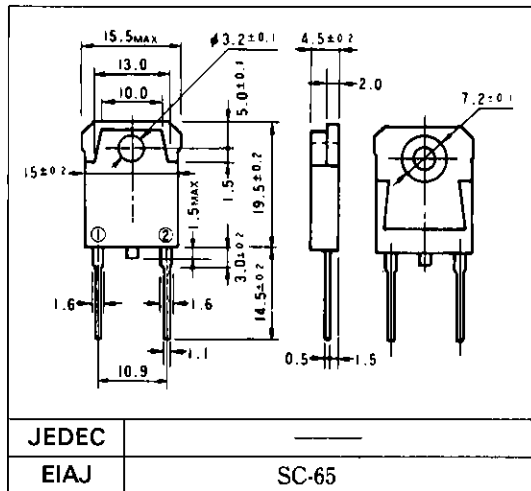


## ショットキーバリアダイオード

### SCHOTTKY BARRIER DIODE

## ■外形寸法：Outline Drawings



## ■特長：Features

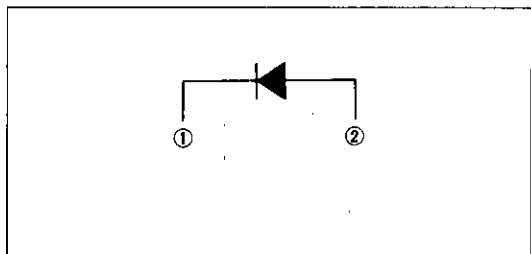
- 低 $V_F$   
Low  $V_F$
- スイッチングスピードが非常に速い  
Super high speed switching.
- プレーナー技術による高信頼性  
High reliability by planer design.

## ■用途：Applications

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

## ■電極接続

### Connection Diagram



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

### ●絶対最大定格：Absolute Maximum Ratings

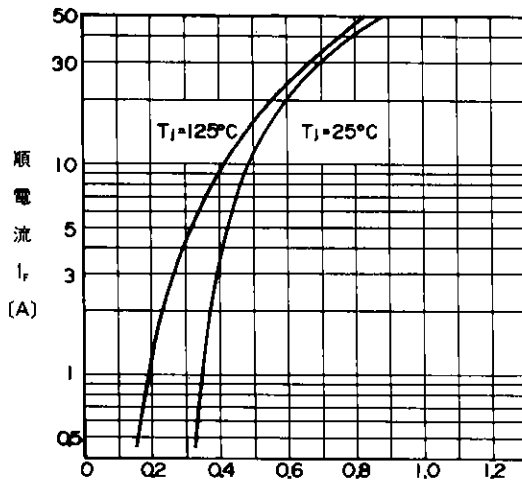
| Items  | Symbols   | Conditions  | Ratings    | Units            |
|--|-----------|---|------------|------------------|
| ピーク繰り返し逆電圧<br>Repetitive Peak Reverse Voltage      | $V_{RRM}$ |   | 40         | V                |
| ピーク非繰り返し逆電圧<br>Non-Repetitive Peak Reverse Voltage | $V_{RSM}$ | $t_w = 500\text{ns}$ duty = 1/10                          | 48         | V                |
| 平均出力電流<br>Average Output Current                   | $I_O$     | 方形波, duty = 1/2, $T_c = 100^\circ\text{C}$<br>Square wave | 15         | A                |
| サージ電流<br>Surge Current                             | $I_{FSM}$ | 正弦波 Sine Wave<br>10ms                                     | 250        | A                |
| 接合温度<br>Operating Junction Temperature             | $T_j$     |   | -40 ~ +125 | $^\circ\text{C}$ |
| 保存温度<br>Storage Temperature                        | $T_{stg}$ |   | -40 ~ +125 | $^\circ\text{C}$ |

### ●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)

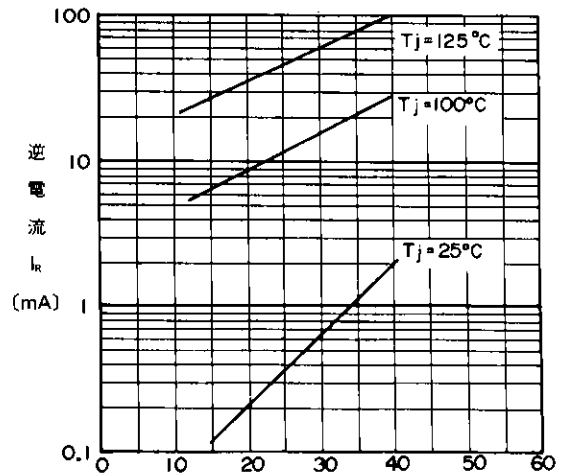
Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless otherwise specified)

| Items                       | Symbols       | Conditions                  | Max. | Units                     |
|-----------------------------|---------------|-----------------------------|------|---------------------------|
| 順電圧<br>Forward Voltage Drop | $V_{FM}$      | $I_{FM} = 12.5\text{A}$     | 0.55 | V                         |
| 逆電流<br>Reverse Current      | $I_{RRM}$     | $V_R = V_{RRM}$             | 10   | mA                        |
| 熱抵抗<br>Thermal Resistance   | $R_{th(j-c)}$ | 接合・ケース間<br>junction to case | 2.0  | $^\circ\text{C}/\text{W}$ |

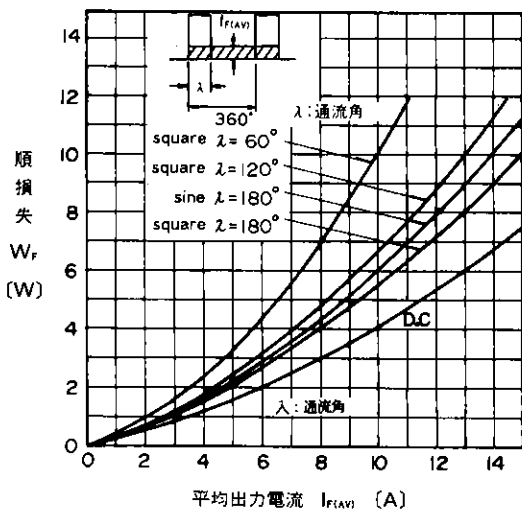
■特性曲線：Characteristics



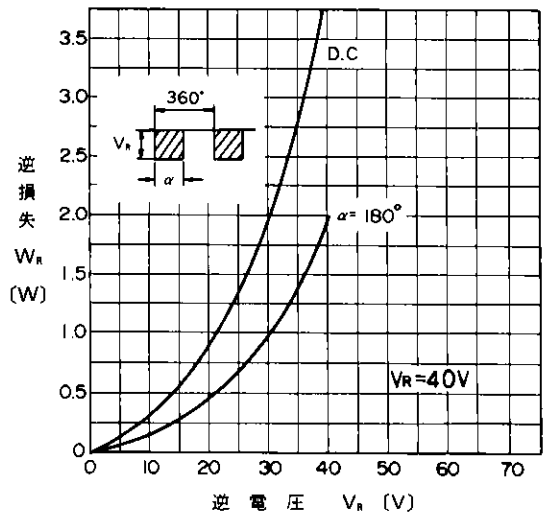
順電圧  $V_F$  (V)  
順特性 (代表特性)  
Forward Characteristics



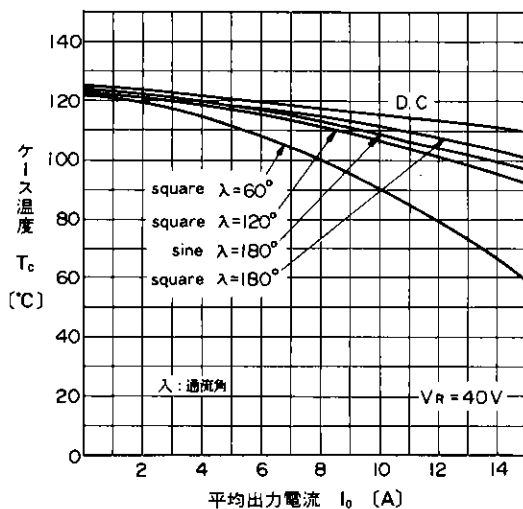
逆電圧  $V_R$  (V)  
逆特性 (代表特性)  
Reverse Characteristics



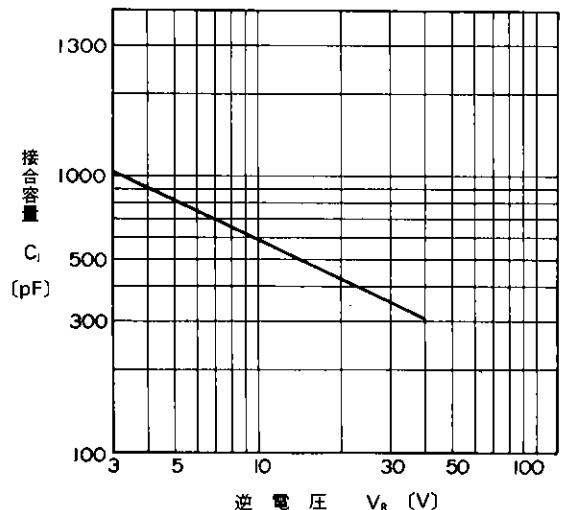
平均出力電流  $I_{F(AV)}$  (A)  
順損失特性  
Forward Power Dissipation



逆電圧  $V_R$  (V)  
逆損失特性  
Reverse Power Dissipation

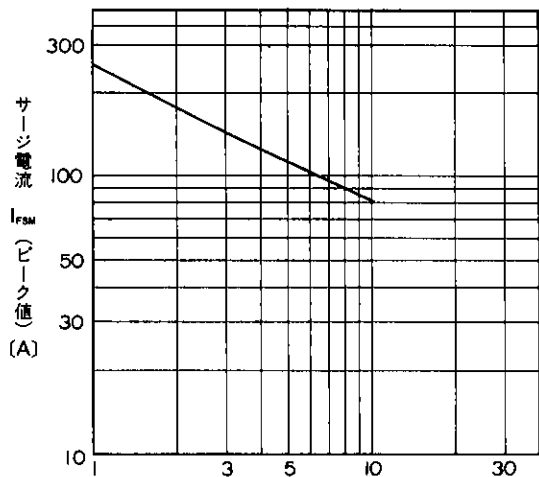


平均出力電流  $I_O$  (A)  
平均出力電流-ケース温度特性  
Average Output Current-Case Temperature



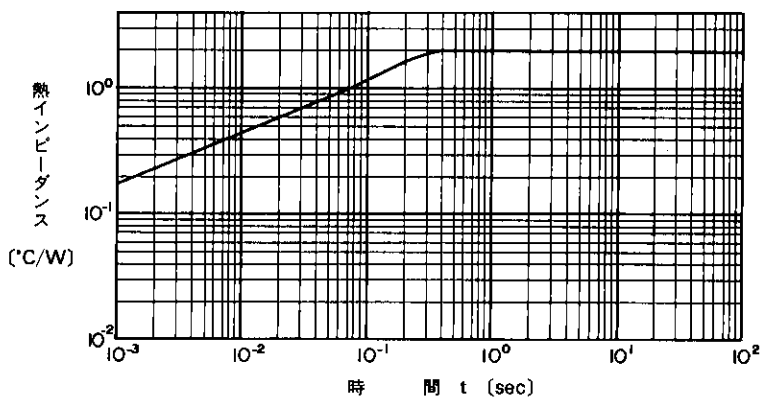
逆電圧  $V_R$  (V)  
接合容量特性 (代表特性)  
Junction Capacitance Characteristics

A



繰返し回数 (50Hz)(回)

サージ電流耐量  
Surge Capability



過渡熱インピーダンス

Transient Thermal Impedance

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