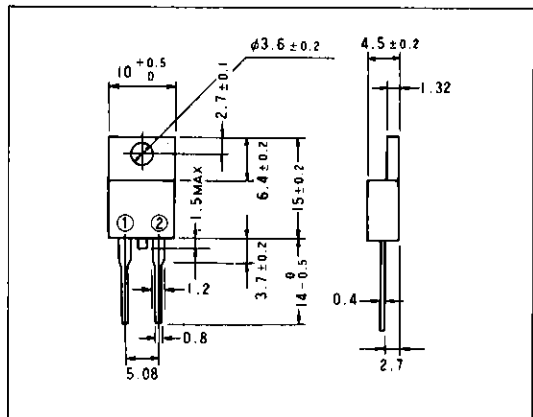


## ショットキーバリアダイオード

### SCHOTTKY BARRIER DIODE

## ■外形寸法：Outline Drawings



|       |          |
|-------|----------|
| JEDEC | TO-220AB |
| EIAJ  | SC-46    |

## ■特長：Features

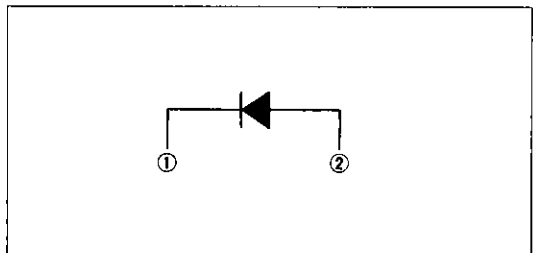
- 低 $V_F$   
Low  $V_F$
- スイッチングスピードが非常に速い  
Super high speed switching.
- プレーナー技術による高信頼性  
High reliability by planer design.

## ■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 | $V_{RRM}$ |   | 45         | V                |
| 平均出力電流<br>Average Output Current              | $I_o$     | 方形波, duty = 1/2, $T_c = 110^\circ\text{C}$<br>Square wave | 10         | 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 | $^\circ\text{C}$ |

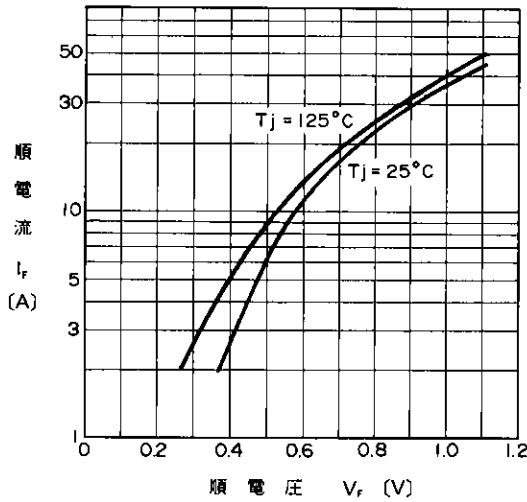
### ●電気的特性(特に指定がない限り周囲温度 $T_a = 25^\circ\text{C}$ とする)

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

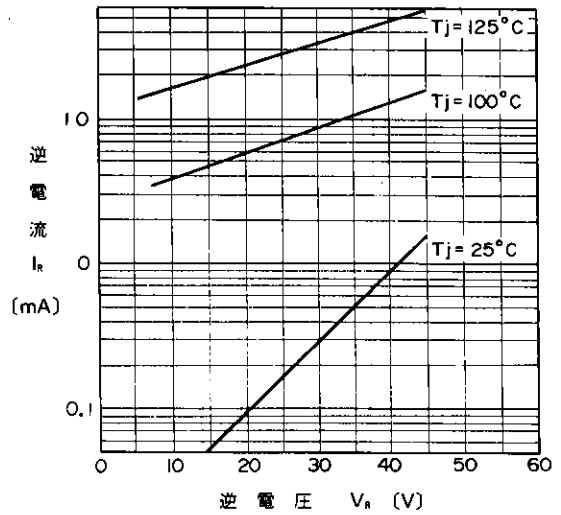
| Items                       | Symbols       | Conditions                  | Max. | Units                     |
|-----------------------------|---------------|-----------------------------|------|---------------------------|
| 順電圧<br>Forward Voltage Drop | $V_{FM}$      | $I_{FM} = 10\text{A}$       | 0.6  | 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 | 2.0  | $^\circ\text{C}/\text{W}$ |

■特性曲線：Characteristics

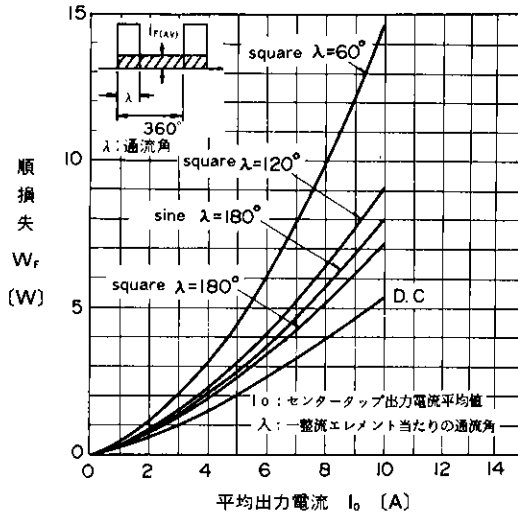
A



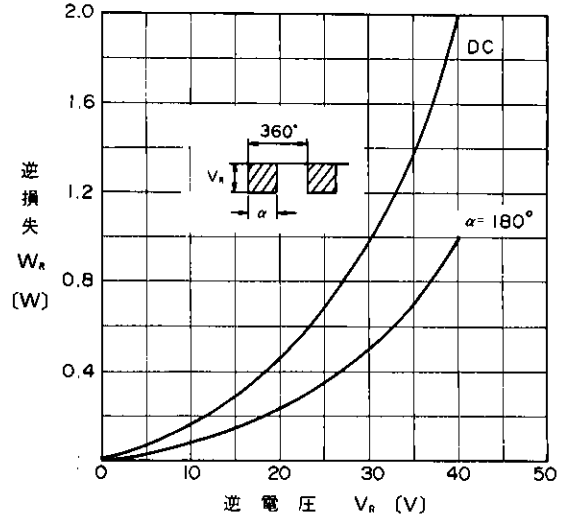
順特性 (代表特性)  
Forward Characteristics



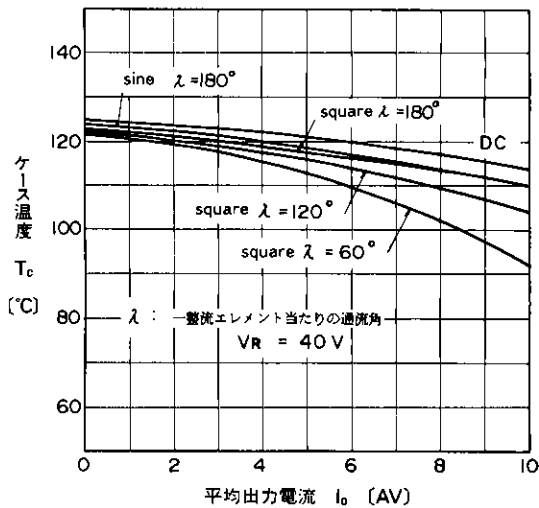
逆特性 (代表特性)  
Reverse Characteristics



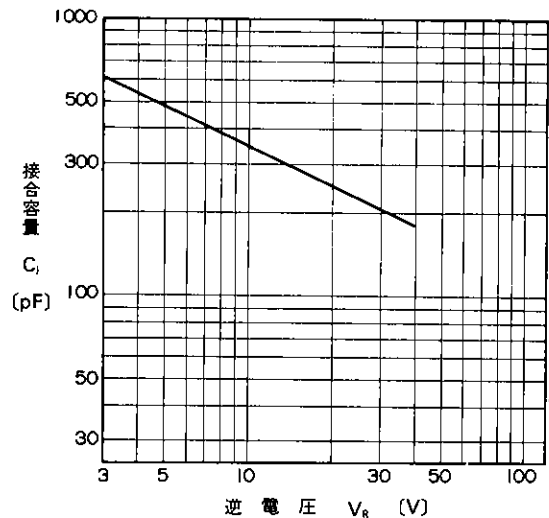
順損失特性  
Forward Power Dissipation



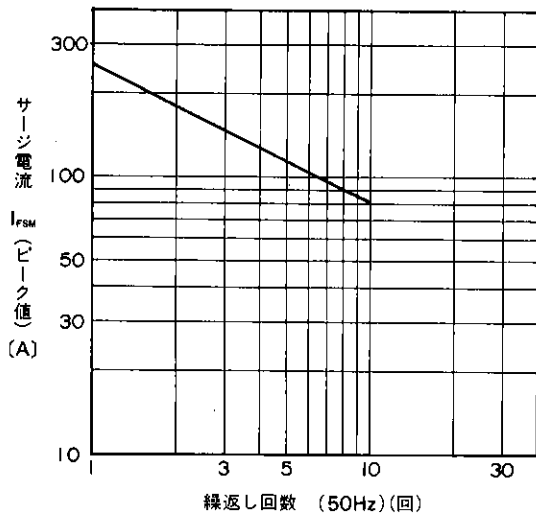
逆損失特性  
Reverse Power Dissipation



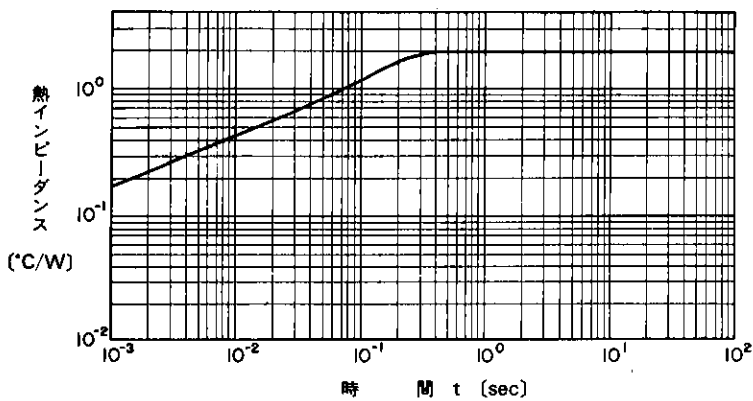
平均出力電流—ケース温度特性  
Average Output Current-Case Temperature



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



サージ電流耐量  
Surge Capability



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