

ショットキーバリアダイオード

SCHOTTKY BARRIER DIODE

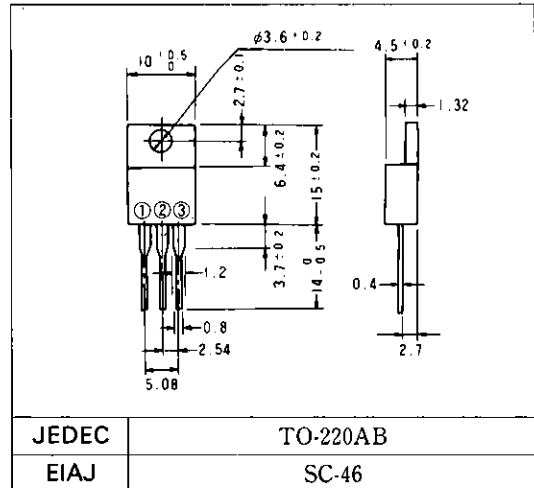
■ 特長 : Features

- 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

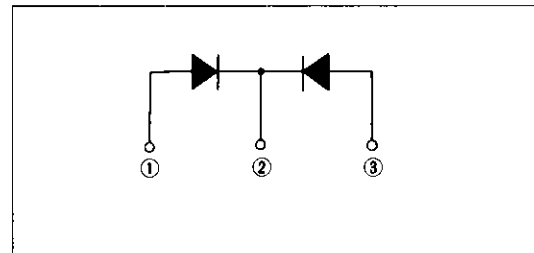
- 高速電力スイッチング
High speed power switching.

■ 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 Repetitive Peak Reverse Voltage | V_{RRM} | | 40 | V |
| ピーク非繰り返し逆電圧 Non-Repetitive Peak Reverse Voltage | V_{RSM} | $t_w = 500\text{ns}$ duty = 1/10 | 48 | V |
| 平均出力電流 Average Output Current | I_o | 方形波, duty = 1/2, $T_c = 97^\circ\text{C}$ Square wave | 10* | A |
| サージ電流 Surge Current | I_{FSM} | 正弦波 Sine Wave 10ms | 120 | A |
| 接合温度 Operating Junction Temperature | T_j | | -40 ~ +125 | $^\circ\text{C}$ |
| 保存温度 Storage Temperature | T_{stg} | | -40 ~ +125 | $^\circ\text{C}$ |

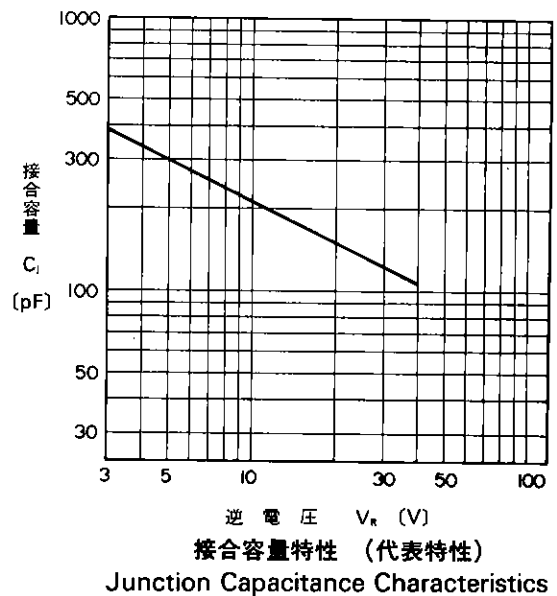
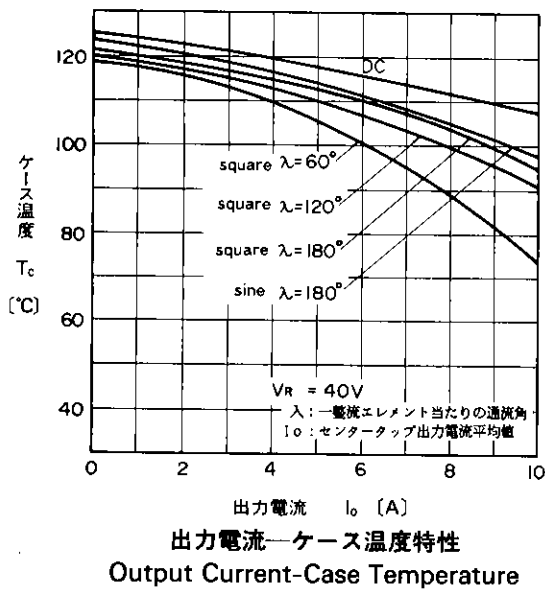
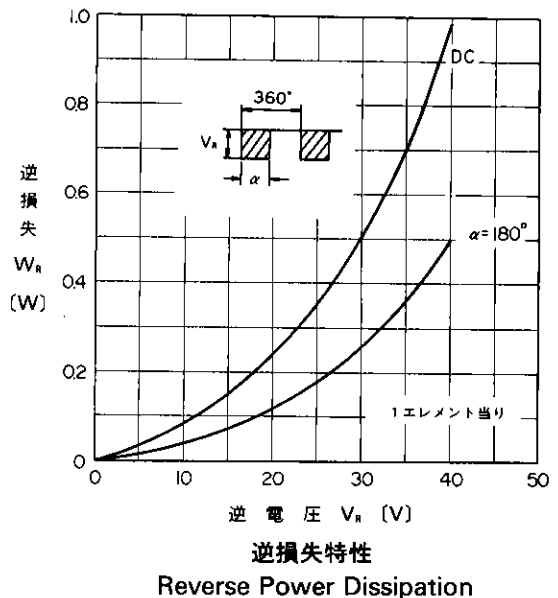
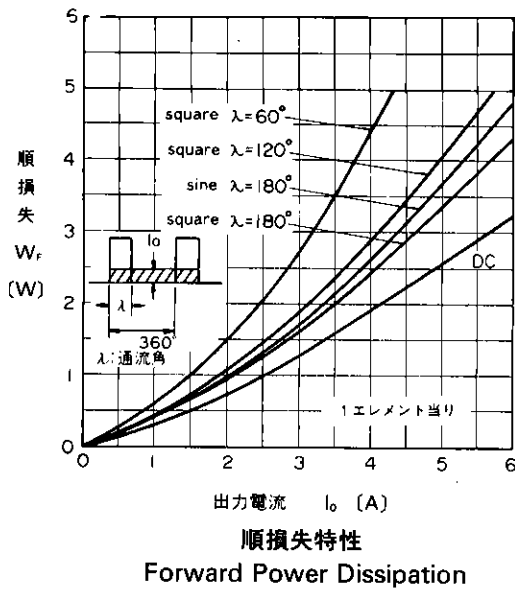
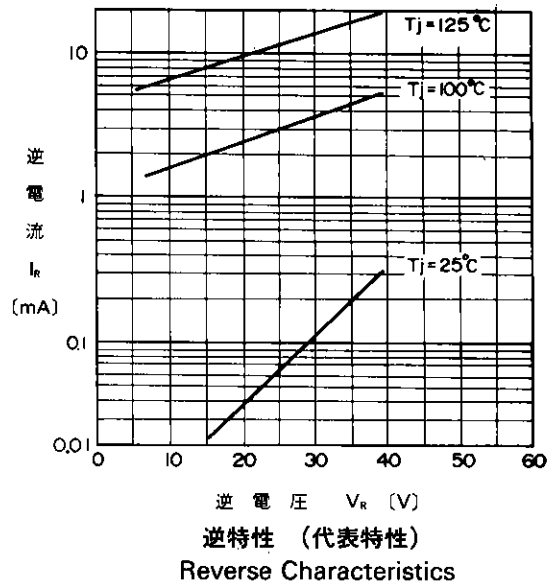
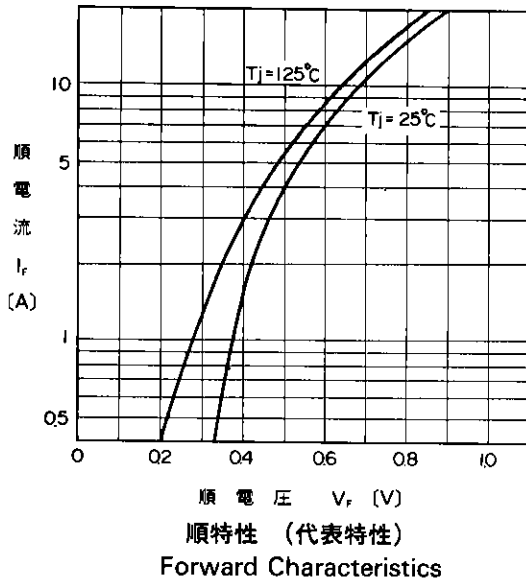
* センタータップ平均出力電流
* average forward current of centertap full wave connection

● 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)

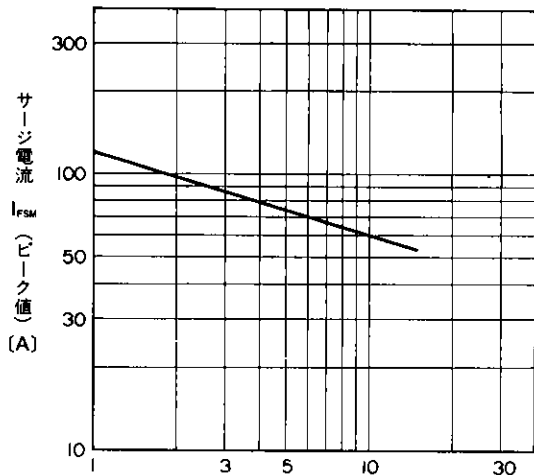
Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

| Items | Symbols | Conditions | Max. | Units |
|-----------------------------|---------------|-----------------------------|------|--------------------|
| 順電圧 Forward Voltage Drop | V_{FM} | $I_{FM} = 4.0\text{A}$ | 0.55 | V |
| 逆電流 Reverse Current | I_{RRM} | $V_R = V_{RRM}$ | 5.0 | mA |
| 熱抵抗 Thermal Resistance | $R_{th(j-c)}$ | 接合・ケース間 Junction to case | 3.0 | $^\circ\text{C/W}$ |

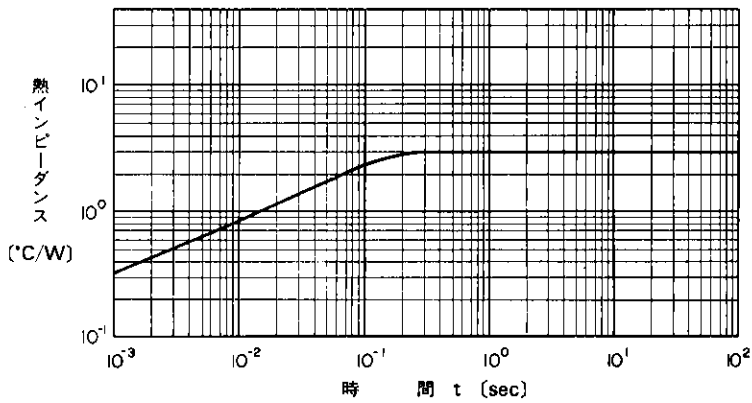
■特性曲線：Characteristics



A



サージ電流耐量
Surge Capability



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