

ショットキーバリアダイオード

SCHOTTKY BARRIER DIODE

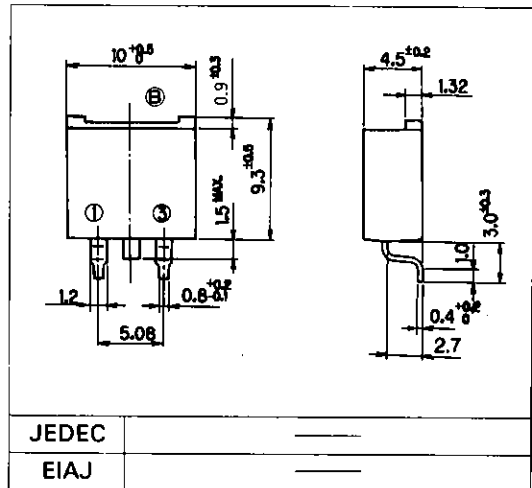
■特長：Features

- 表面実装が可能
Surface mount device.
- 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

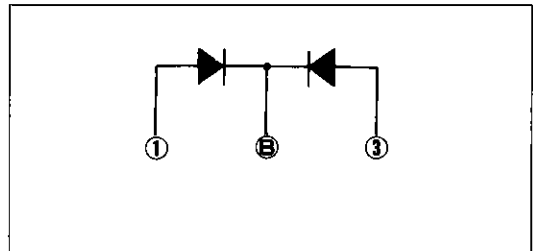
- 高速電力スイッチング
High speed power switching.

■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} | | 90 | V |
| ピーク非繰り返し逆電圧 Non-Repetitive Peak Reverse Voltage | V_{RSM} | $tw=500ns, duty=1/10$ | 100 | V |
| 平均出力電流 Average Output Current | I_O | 方形波, $duty=1/2, T_c=92^\circ C$ Square wave | 10* | A |
| サージ電流 Surge Current | I_{FSM} | 正弦波 Sine wave 10ms | 80 | A |
| 接合温度 Operating Junction Temperature | T_j | | -40~+125 | $^\circ C$ |
| 保存温度 Storage Temperature | T_{stg} | | -40~+125 | $^\circ C$ |

*センタータップ平均出力電流

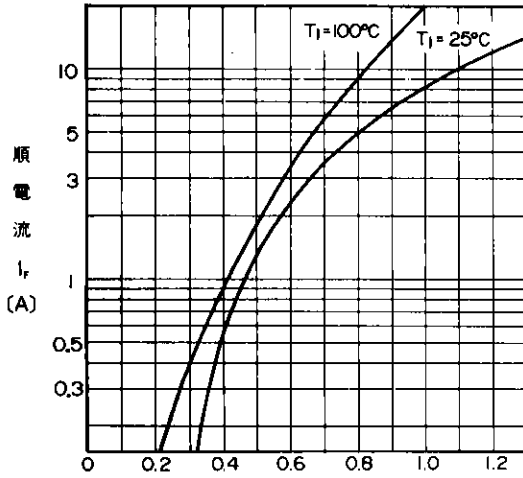
* average forward current of centertap full wave connection

●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)

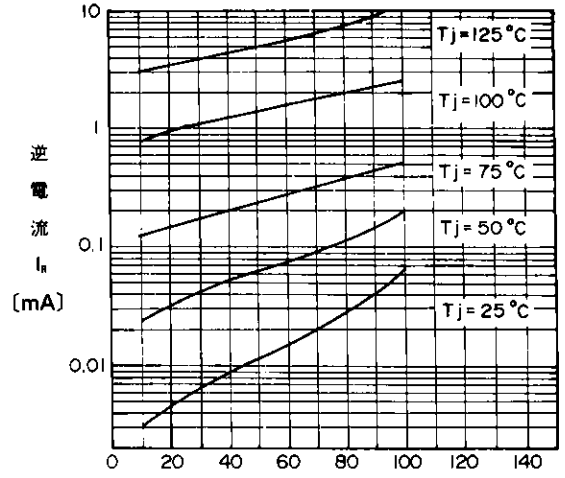
Electrical Characteristics ($T_a=25^\circ C$ Unless otherwise specified)

| Items | Symbols | Conditions | Max. | Units |
|-----------------------------|---------------|-----------------------------|------|--------------|
| 順電圧 Forward Voltage Drop | V_{FM} | $I_{FM}=4A$ | 0.9 | 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 | $^\circ C/W$ |

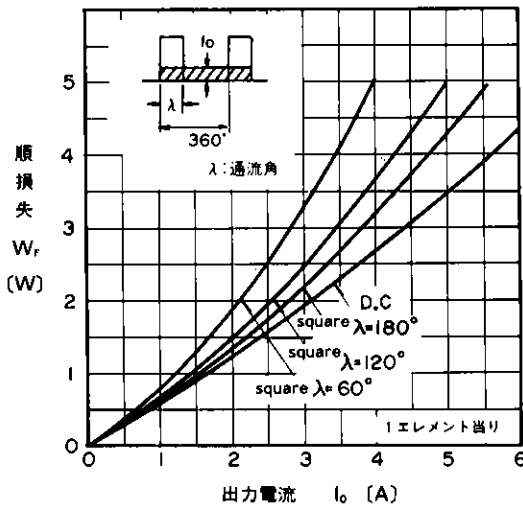
■特性曲線 : Characteristics



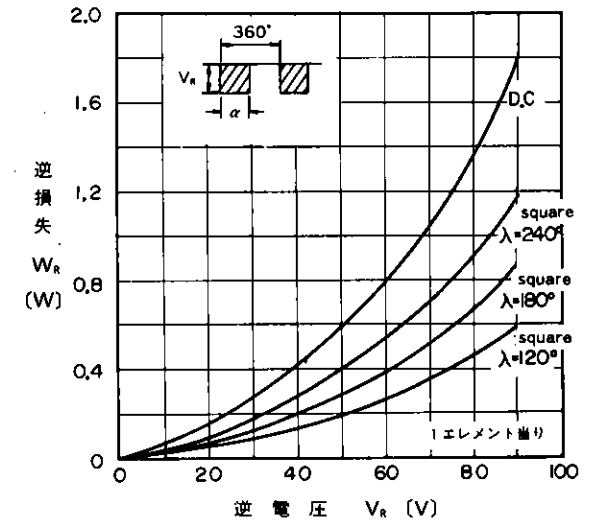
順特性 (代表特性)
Forward Characteristics



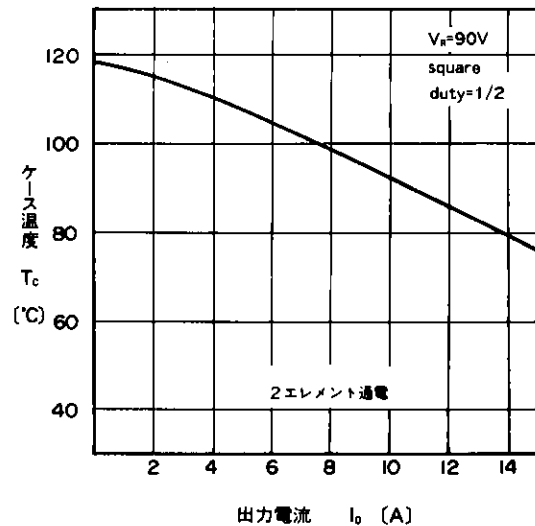
逆特性 (代表特性)
Reverse Characteristics



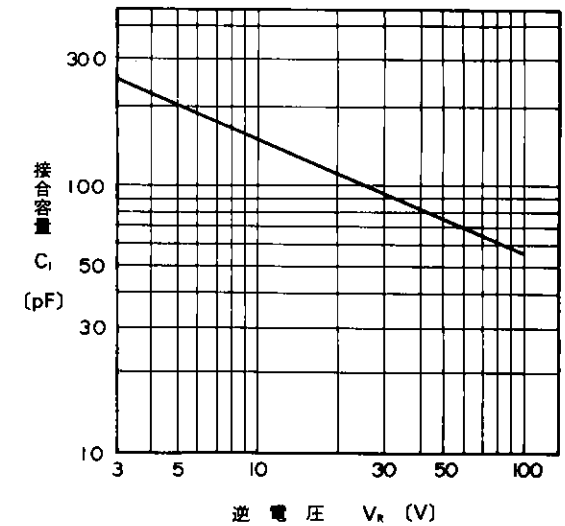
順損失特性
Forward Power Dissipation



逆損失特性
Reverse Power Dissipation

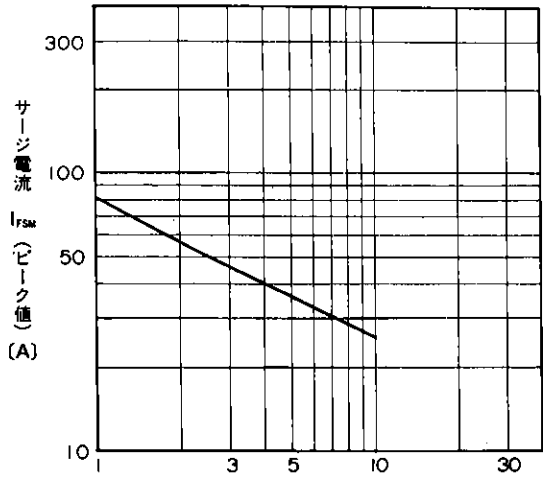


出力電流—ケース温度特性
Output Current-Case Temperature

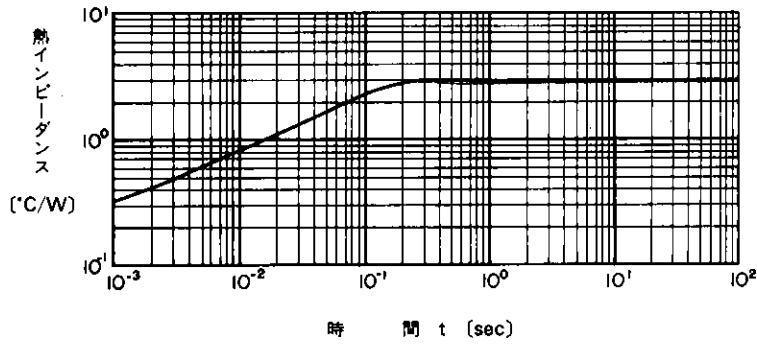


接合容量特性 (代表特性)
Junction Capacitance Characteristics

A



サージ電流耐量
Surge Capability



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

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