

### 低損失超高速ダイオード

#### LOW LOSS SUPER HIGH SPEED RECTIFIER

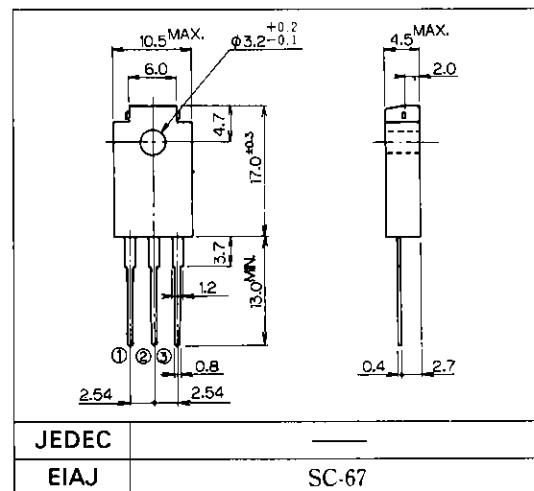
#### ■特長：Features

- 取り付け面が絶縁されたフルモールドタイプ  
Insulated package by fully molding.
- 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

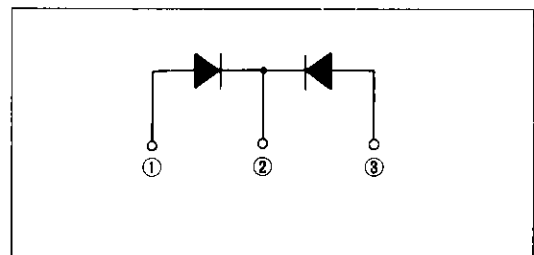
- 高速電力スイッチング  
High speed power switching.

#### ■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 | $V_{RRM}$ |                                                       | 200        | V                |
| 平均出力電流<br>Average Output Current              | $I_O$     | 方形波, duty=1/2, $T_c=115^\circ\text{C}$<br>Square wave | 10*        | A                |
| サージ電流<br>Surge Current                        | $I_{FSM}$ | 正弦波 Sine wave<br>10ms                                 | 50         | A                |
| 接合温度<br>Operating Junction Temperature        | $T_j$     |                                                       | -40 ~ +150 | $^\circ\text{C}$ |
| 保存温度<br>Storage Temperature                   | $T_{stg}$ |                                                       | -40 ~ +150 | $^\circ\text{C}$ |

\* センタータップ平均出力電流

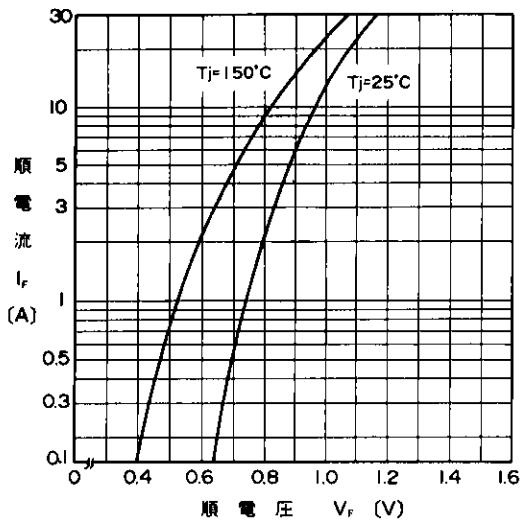
\* average forward current of centertap full wave connection

##### ●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)

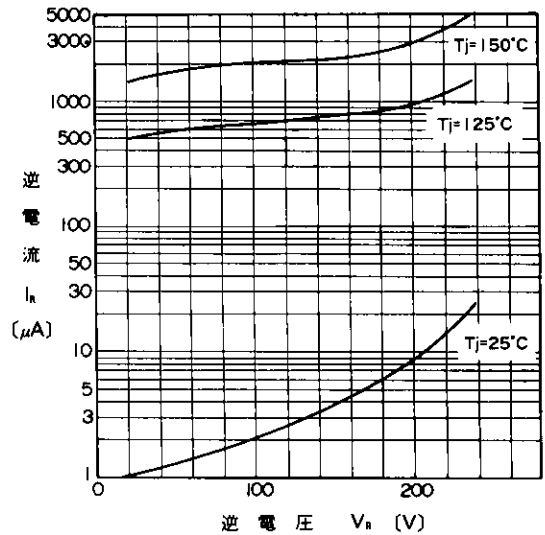
Electrical Characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

| Items                          | Symbols         | Conditions                                                     | Max. | Units              |
|--------------------------------|-----------------|----------------------------------------------------------------|------|--------------------|
| 順電圧<br>Forward Voltage Drop    | $V_{FM}$        | $I_{FM}=5.0\text{A}$                                           | 0.95 | V                  |
| 逆電流<br>Reverse Current         | $I_{RRM}$       | $V_R=V_{RRM}$                                                  | 100  | $\mu\text{A}$      |
| 逆回復時間<br>Reverse Recovery Time | $t_{rr}$        | $I_F=0.1\text{A}$ , $I_R=0.2\text{A}$ , $I_{rec}=0.05\text{A}$ | 35   | ns                 |
| 熱抵抗<br>Thermal Resistance      | $R_{(th(j-c))}$ | 接合・ケース間<br>junction to case                                    | 3.5  | $^\circ\text{C/W}$ |

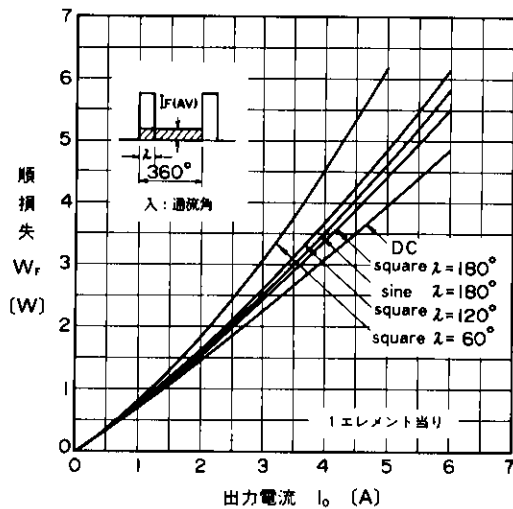
■特性曲線：Characteristics



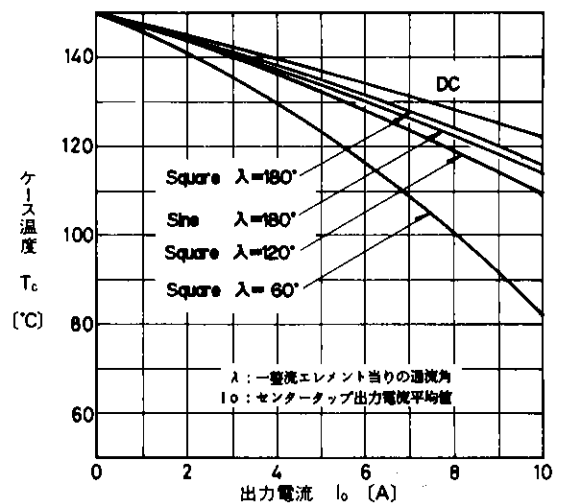
順特性（代表特性）  
Forward Characteristics



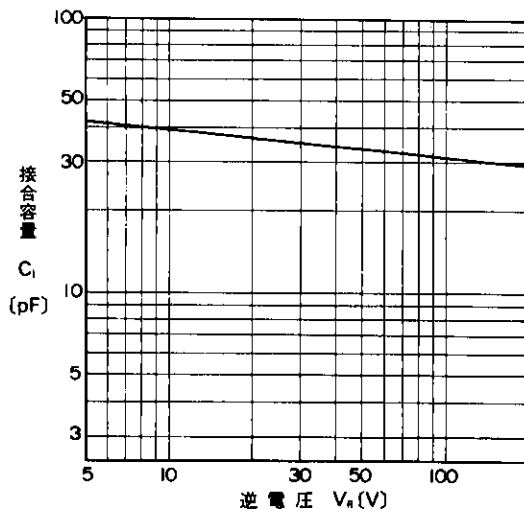
逆特性（代表特性）  
Reverse Characteristics



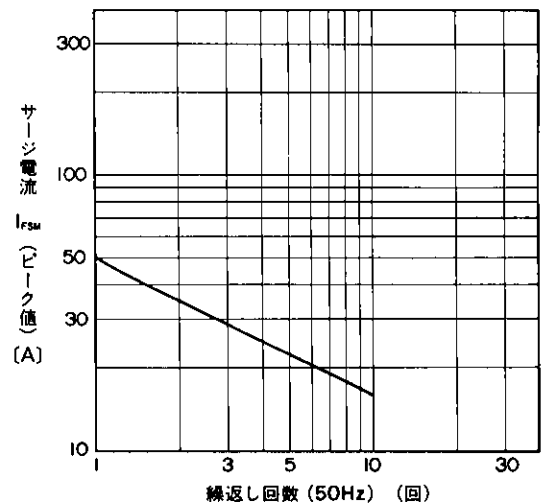
順損失特性  
Forward Power Dissipation



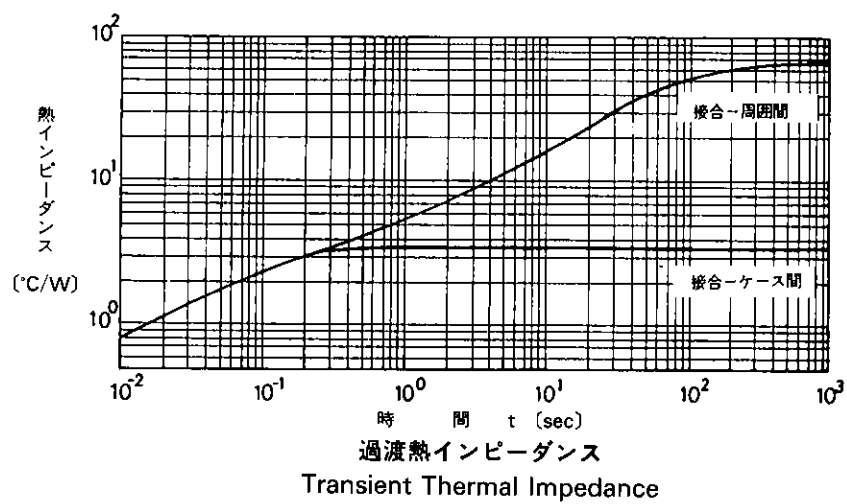
出力電流—ケース温度特性  
Output Current-Case Temperature



接合容量特性（代表特性）  
Junction Capacitance



サージ電流耐量  
Surge Capability



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For more information, contact:

**Collmer Semiconductor, Inc.**

P.O. Box 702708

Dallas, TX 75370

972-233-1589

972-233-0481 Fax

<http://www.collmer.com>