

## 低損失超高速ダイオード

### LOW LOSS SUPER HIGH SPEED RECTIFIER

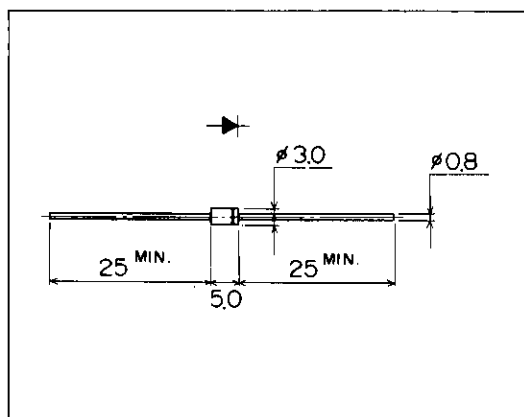
#### ■特長：Features

- 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.

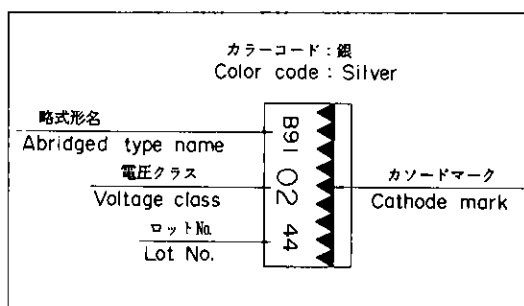
#### ■用途：Applications

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

#### ■外形寸法：Outline Drawings



#### ■表示：Marking



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

##### ●絶対最大定格：Absolute Maximum Ratings

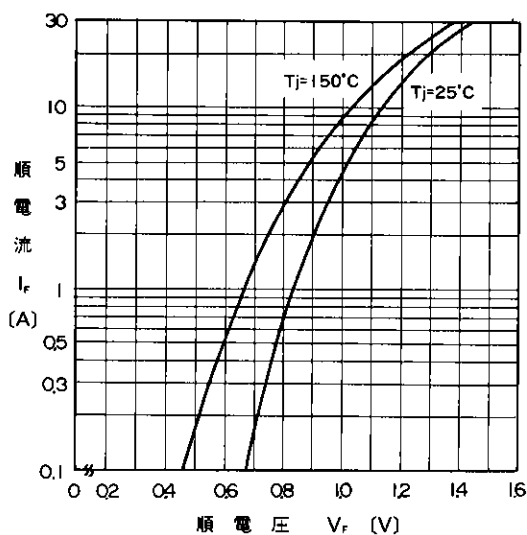
| Items                                         | Symbols     | Conditions                                                         | Ratings         | Units            |
|-----------------------------------------------|-------------|--------------------------------------------------------------------|-----------------|------------------|
| ピーク繰り返し逆電圧<br>Repetitive Peak Reverse Voltage | $V_{RRM}$   |                                                                    | 200             | V                |
| 平均順電流<br>Average Forward Current              | $I_{F(AV)}$ | 方形波 duty = $\frac{1}{2}$ , $T_a = 50^\circ\text{C}$<br>Square wave | 1.0             | A                |
| サージ電流<br>Surge Current                        | $I_{FSM}$   | 正弦波 Sine wave<br>10ms $T_j = 150^\circ\text{C}$                    | 20              | A                |
| 接合温度<br>Operating Junction Temperature        | $T_j$       |                                                                    | $-40 \sim +150$ | $^\circ\text{C}$ |
| 保存温度<br>Storage Temperature                   | $T_{stg}$   |                                                                    | $-40 \sim +150$ | $^\circ\text{C}$ |

##### ●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)

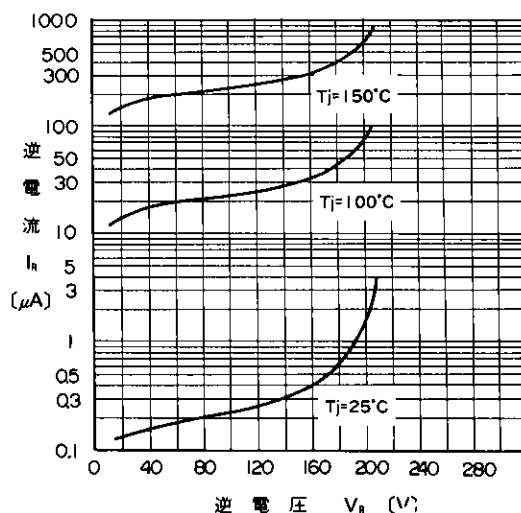
Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless otherwise specified)

| Items                          | Symbols   | Conditions                                                           | Max. | Units         |
|--------------------------------|-----------|----------------------------------------------------------------------|------|---------------|
| 順電圧<br>Forward Voltage Drop    | $V_{FM}$  | $I_{FM} = 1.0\text{A}$                                               | 0.95 | V             |
| 逆電流<br>Reverse Current         | $I_{RRM}$ | $V_R = V_{RRM}$                                                      | 50   | $\mu\text{A}$ |
| 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            |

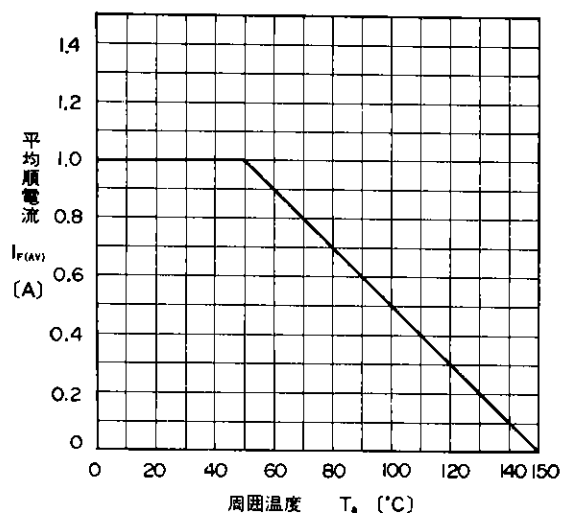
■特性曲線：Characteristics



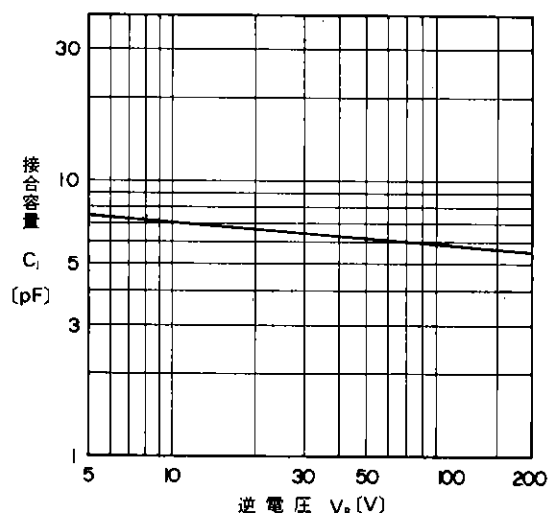
順特性 (代表特性)  
Forward Characteristics



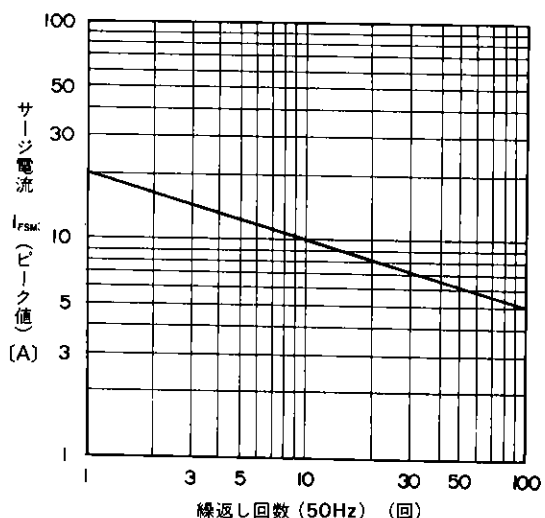
逆特性 (代表特性)  
Reverse Characteristics



平均順電流—周囲温度特性  
Current Derating ( $I_{F(AV)}-T_a$ )



接合容量特性 (代表特性)  
Junction Capacitance



サージ電流耐量  
Surge Capability

A

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