

### 低損失超高速ダイオード

### LOW LOSS SUPER HIGH SPEED RECTIFIER

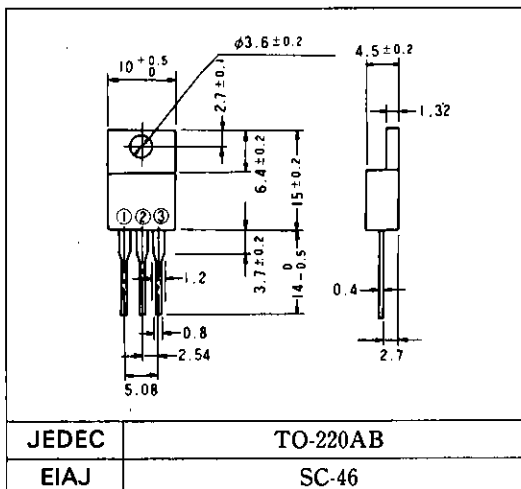
#### ■ 特長 : Features

- 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

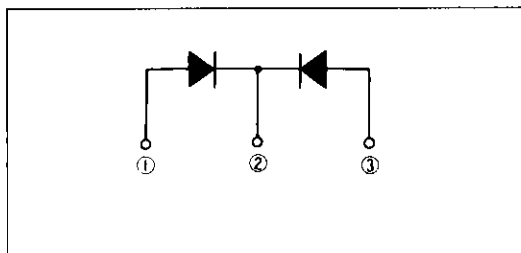
- 高速電力スイッチング  
High speed power switching.

#### ■ 外形寸法 : Outline Drawings



#### ■ 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	$V_{RRM}$		200	V
平均出力電流 Average Output Current	$I_o$	方形波, duty = 1/2, $T_c = 120^\circ\text{C}$ Square wave	5*	A
サージ電流 Surge Current	$I_{FSM}$	正弦波 Sine wave 10ms	25	A
接合温度 Operating Junction Temperature	$T_j$		-40 ~ +150	$^\circ\text{C}$
保存温度 Storage Temperature	$T_{stg}$		-40 ~ +150	$^\circ\text{C}$

\*センタータップ平均出力電流

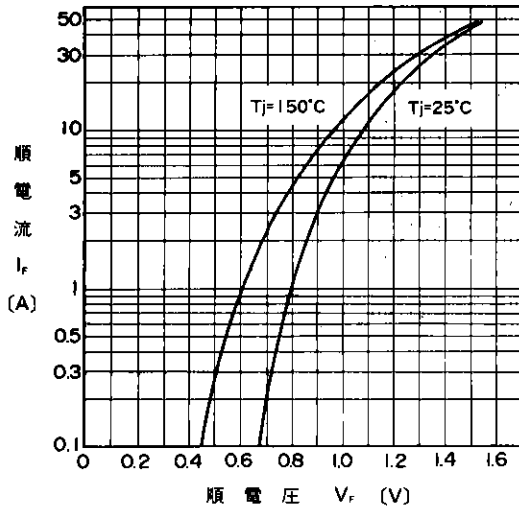
\* average forward current of centertap full wave connection

##### ● 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)

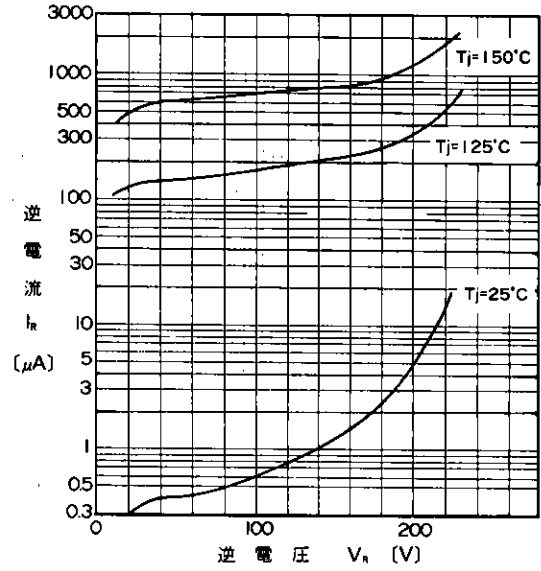
Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless otherwise specified)

Items	Symbols	Conditions	Max.	Units
順電圧 Forward Voltage Drop	$V_{FM}$	$I_{FM} = 2.5\text{A}$	0.95	V
逆電流 Reverse Current	$I_{RRM}$	$V_R = V_{RRM}$	100	$\mu\text{A}$
逆回復時間 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 Thermal Resistance	$R_{th(j-c)}$	接合・ケース間 junction to case	5.0	$^\circ\text{C}/\text{W}$

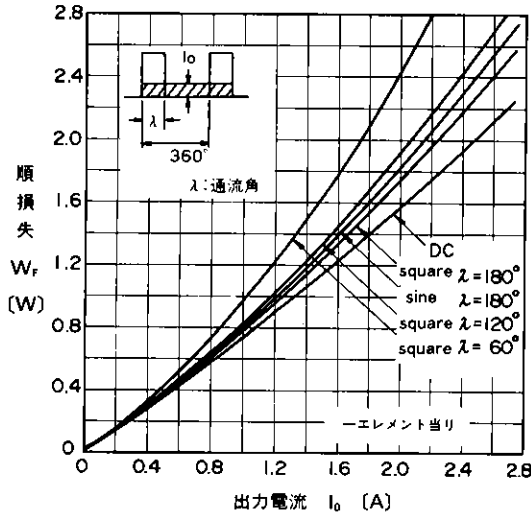
■特性曲線：Characteristics



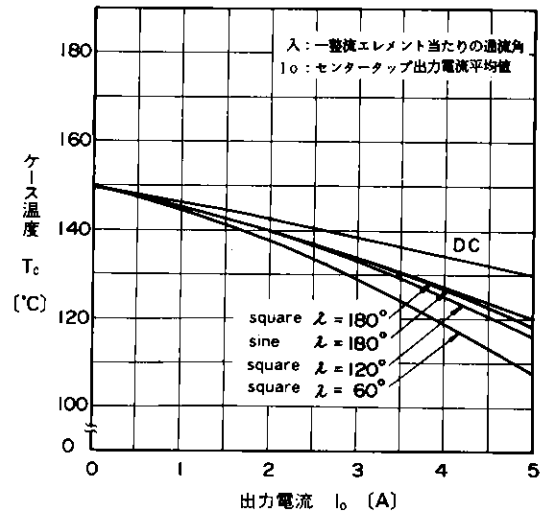
順特性 (代表特性)  
Forward Characteristics



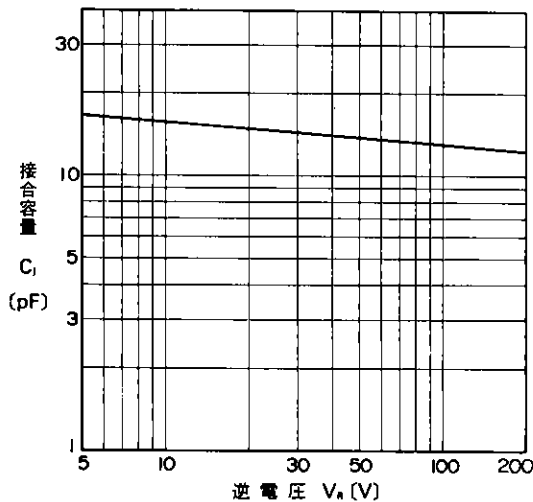
逆特性 (代表特性)  
Reverse Characteristics



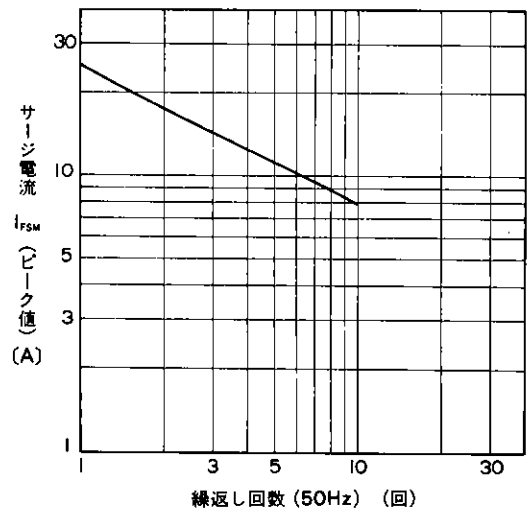
順損失特性  
Forward Power Dissipation



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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