

低損失超高速ダイオード

LOW LOSS SUPER HIGH SPEED RECTIFIER

■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.

■定格と特性：Maximum Ratings and Characteristics

●絶対最大定格：Absolute Maximum Ratings

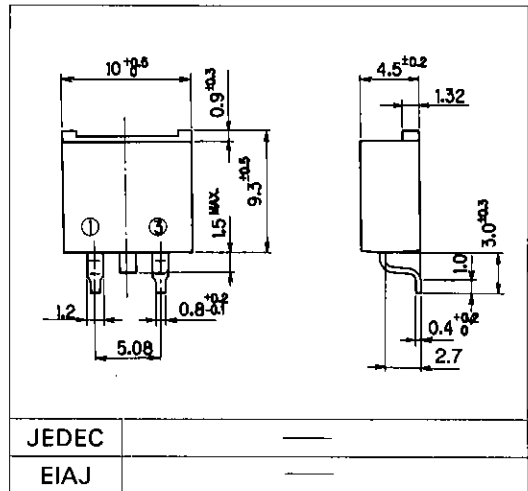
Items	Symbols	Conditions	Ratings	Units
ピーク繰り返し逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}		600	V
平均出力電流 Average Output Current	I_O	矩形波, duty = 1/2, $T_C = 105^\circ\text{C}$ Rectangle wave	10	A
サージ電流 Surge Current	I_{FSM}	正弦波 Sine wave 10ms	80	A
接合温度 Operating Junction Temperature	T_j		-40 ~ +150	$^\circ\text{C}$
保存温度 Storage Temperature	T_{stg}		-40 ~ +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)

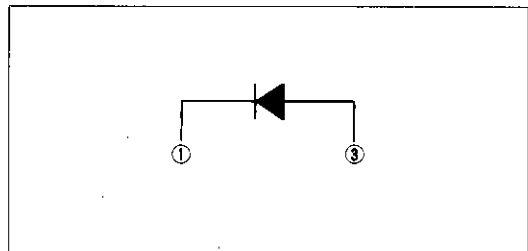
Items	Symbols	Conditions	Max.	Units
順電圧 Forward Voltage Drop	V_{FM}	$I_F = 10\text{A}$	1.7	V
逆電流 Reverse Current	I_{RRM}	$V_R = V_{RRM}$	500	μA
逆回復時間 Reverse Recovery Time	t_{rr}	$I_F = 0.1\text{A}$, $I_R = 0.2\text{A}$, $I_{rec} = 0.05\text{A}$	50	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$		2.5	$^\circ\text{C/W}$

■外形寸法：Outline Drawings

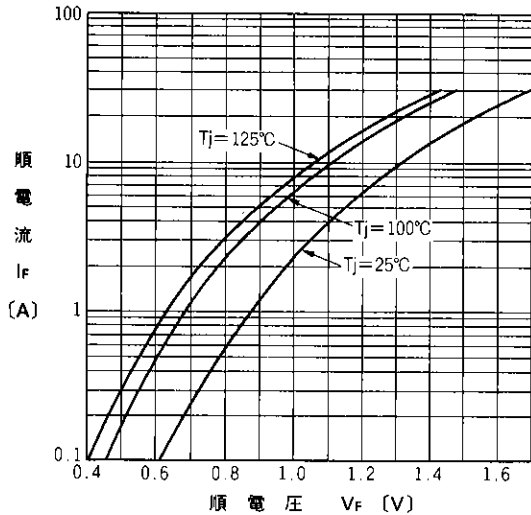


■電極接続

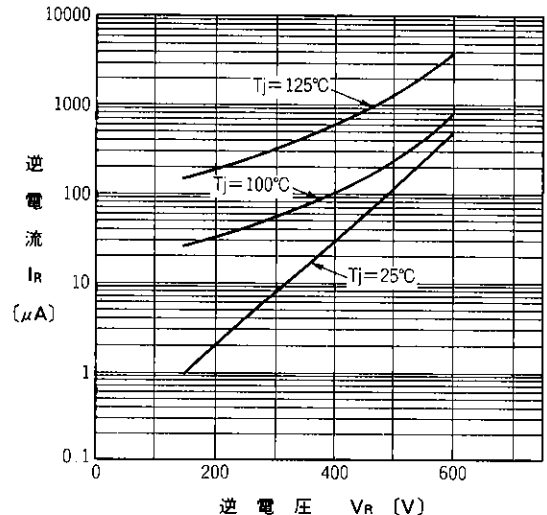
Connection Diagram



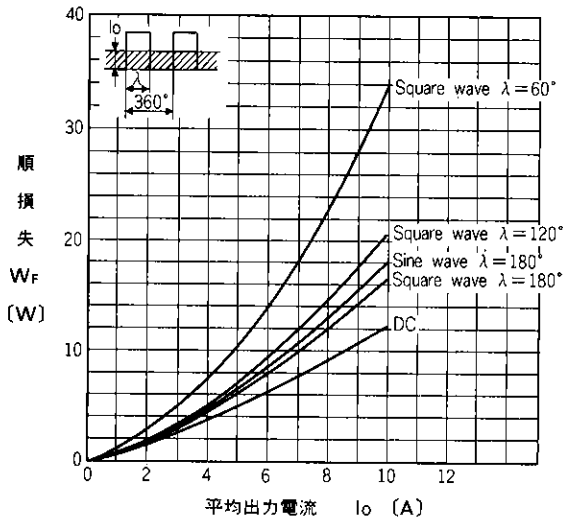
■特性曲線：Characteristics



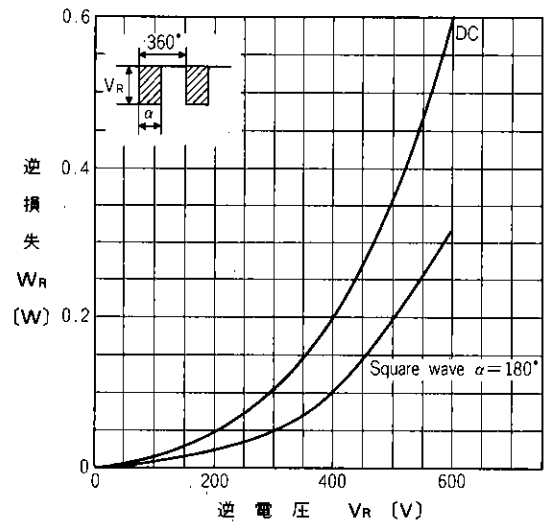
順特性 (代表特性)
Forward Characteristics



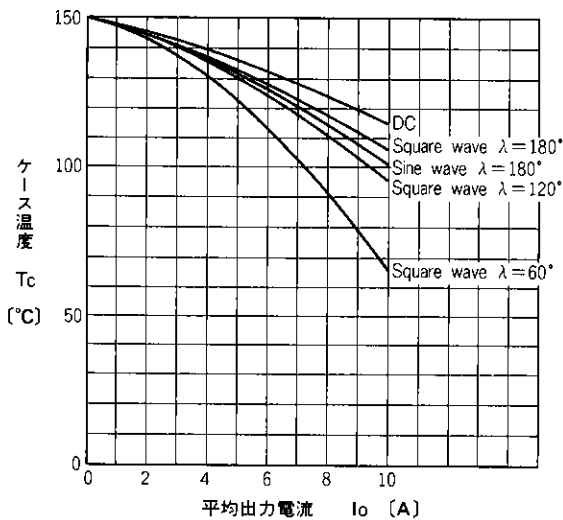
逆特性 (代表特性)
Reverse Characteristics



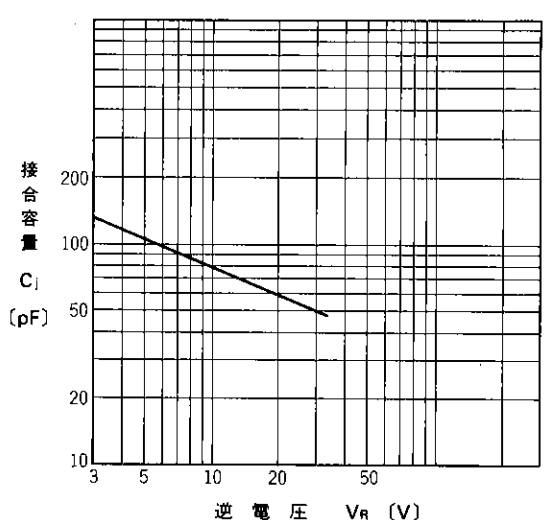
順損失特性
Forward Power Dissipation



逆損失特性
Reverse Power Dissipation

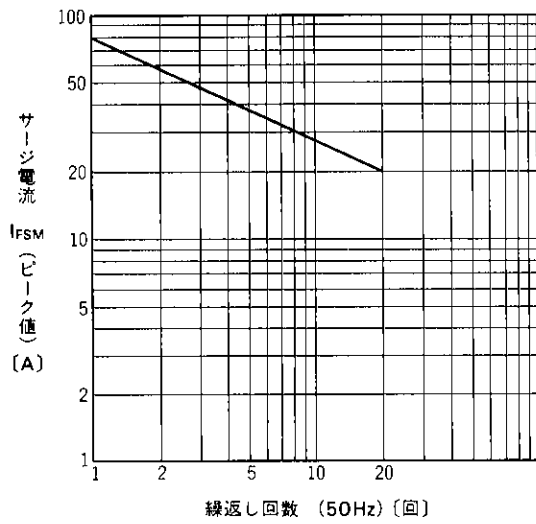


出力電流-ケース温度特性
Output Current - Case Temperature

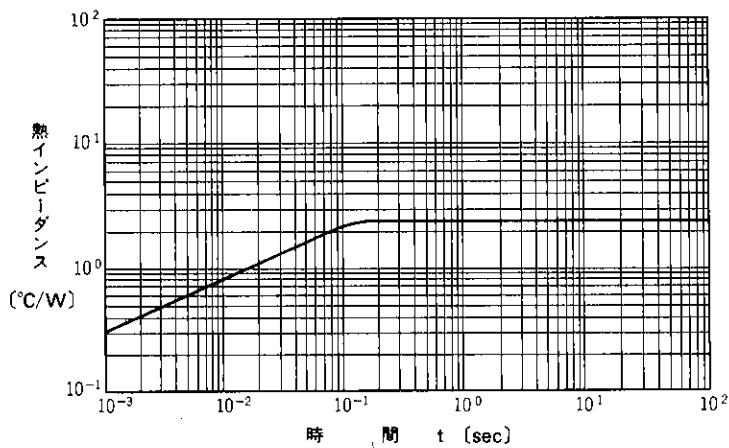


接合容量特性 (代表特性)
Junction Capacitance Characteristics

A



繰返し回数 (50Hz) [回]
 サージ電流耐量
 Surge Capability



時間 t [sec]
 過渡熱インピーダンス
 Transient Thermal Impedance