

低損失超高速ダイオード

LOW LOSS SUPER HIGH SPEED RECTIFIER

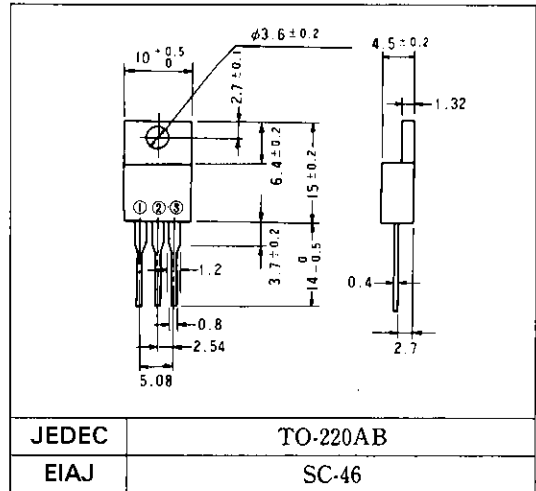
■ 特長 : Features

- 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.

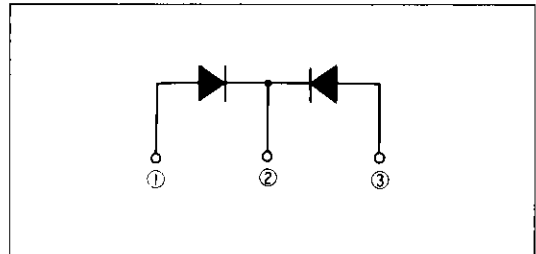
■ 外形寸法 : Outline Drawings



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■ 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, $T_c = 125^\circ\text{C}$ Square wave	10*	A
サージ電流 Surge Current	I_{FSM}	正弦波 Sine wave 10ms	50	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

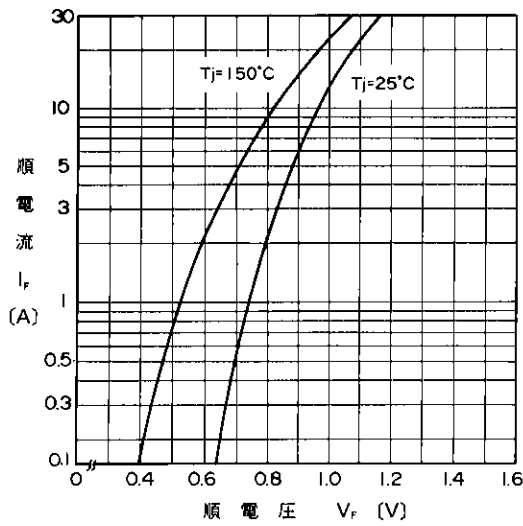
* average forward current of centertap full wave connection

● 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)

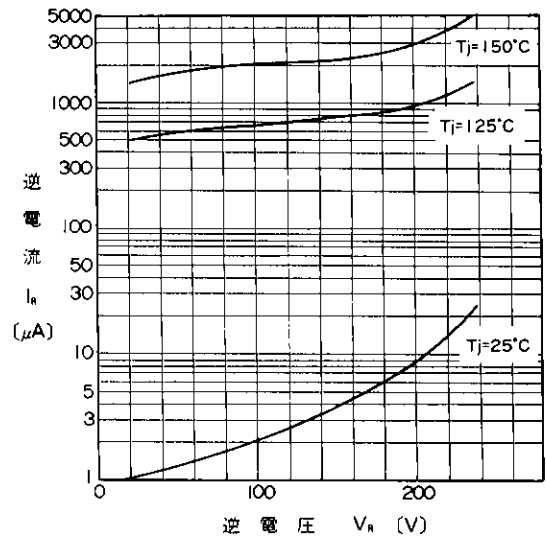
Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Items	Symbols	Conditions	Max.	Units
順電圧 Forward Voltage Drop	V_{FM}	$I_{FM} = 5.0\text{A}$	0.95	V
逆電流 Reverse Current	I_{RRM}	$V_R = V_{RRM}$	100	μA
逆回復時間 Reverse Recovery Time	t_{rr}	$I_F = 0.1\text{A}, I_R = 0.2\text{A}, I_{rec} = 0.05\text{A}$	35	ns
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合・ケース間 junction to case	2.5	$^\circ\text{C}/\text{W}$

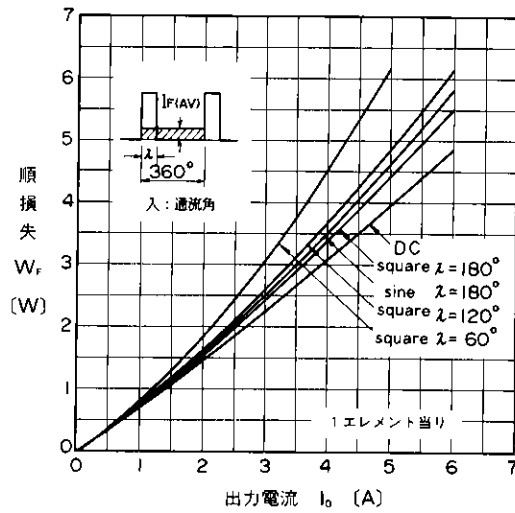
■特性曲線：Characteristics



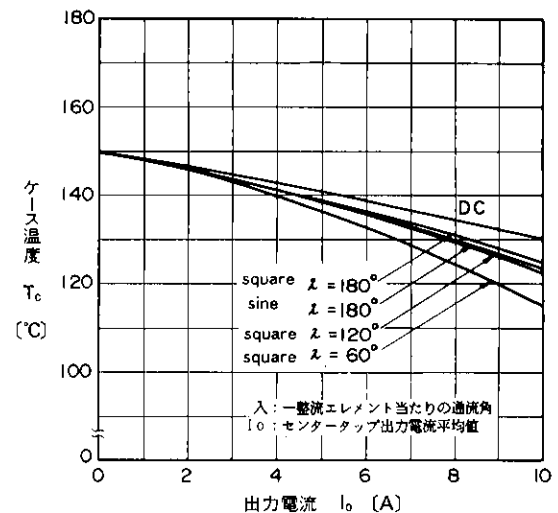
順特性 (代表特性)
Forward Characteristics



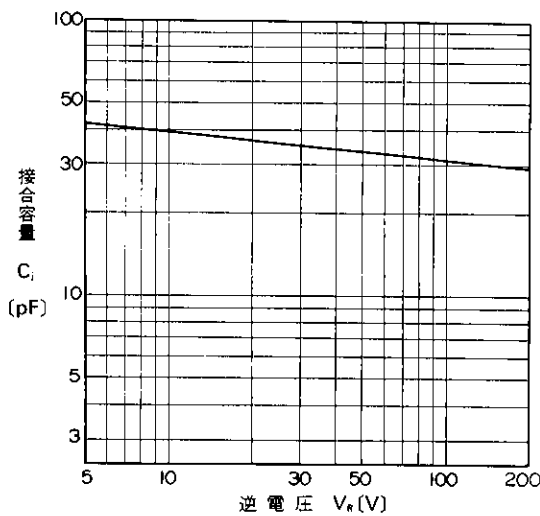
逆特性 (代表特性)
Reverse Characteristics



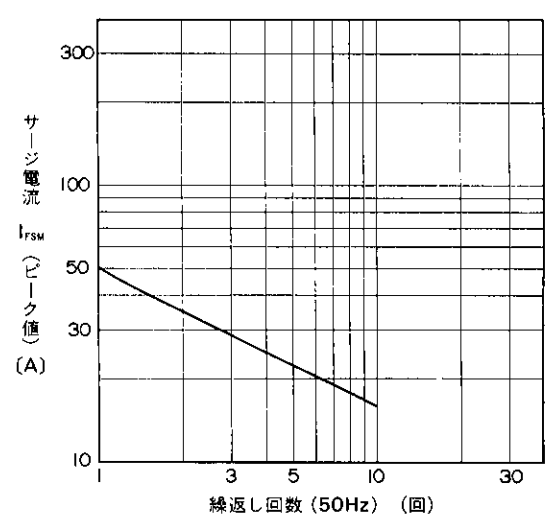
順損失特性
Forward Power Dissipation



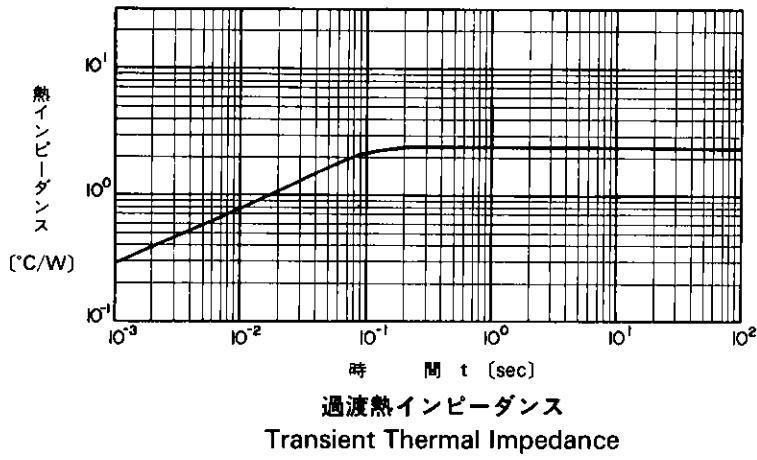
出力電流—ケース温度特性
Output Current-Case Temperature



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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