

高速整流ダイオード

FAST RECOVERY DIODE

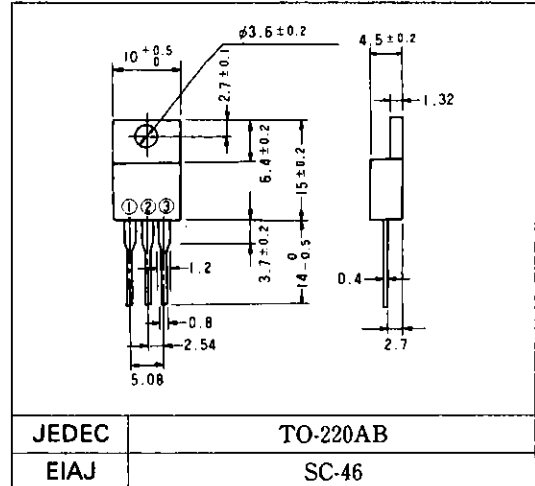
■特長：Features

- 逆回復波形がソフトなためノイズが低い
Soft recovery, low noise.
- 高信頼性
High reliability

■用途：Applications

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

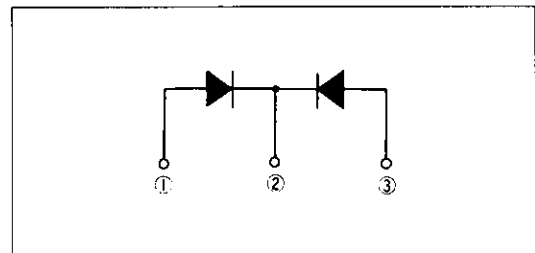
■外形寸法：Outline Drawings



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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
			-02	
ピーク繰り返し逆電圧 Repetitive Peak Reverse Voltage	V_{RRM}		200	V
ピーク非繰り返し逆電圧 Non-Repetitive Peak Reverse Voltage	V_{RSM}		220	V
平均出力電流 Average Output Current	I_O	方形波, duty = 1/2, $T_c = 103^\circ\text{C}$ Square wave	10*	A
サージ電流 Surge Current	I_{FSM}	正弦波 Sine wave 10ms 定格負荷状態より	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

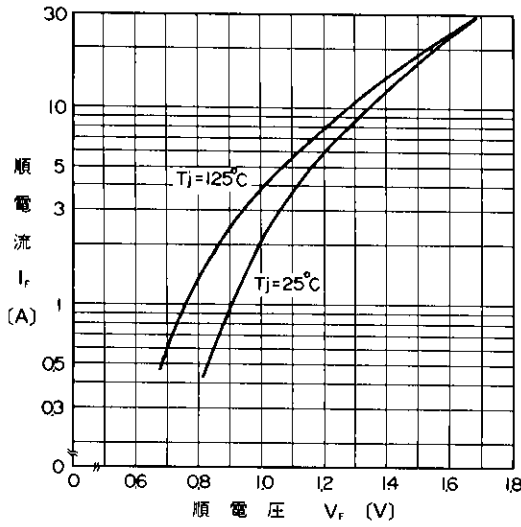
* average forward current of centertap full wave connection

●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)

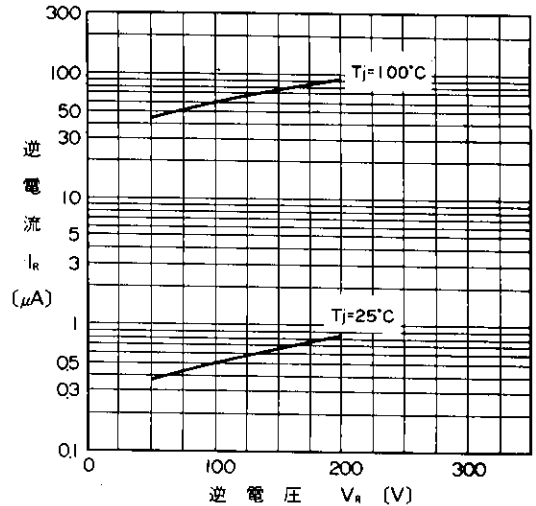
Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Items	Symbols	Conditions	Max.	Units
順電圧 Forward Voltage Drop	V_{FM}	$I_{FM} = 5\text{A}$	1.4	V
逆電流 Reverse Current	I_{RRM}	$V_R = V_{RRM}$	100	μA
逆回復時間 Reverse Recovery Time	t_{rr}	$I_F = 0.1\text{A}, I_R = 0.1\text{A}$	100	ns
		$I_F = 0.1\text{A}, I_R = 0.2\text{A}, I_{rec} = 0.05\text{A}$	45	
熱抵抗 Thermal Resistance	$R_{th(j-c)}$	接合・ケース間 平滑直流 junction to case	3.0	$^\circ\text{C/W}$

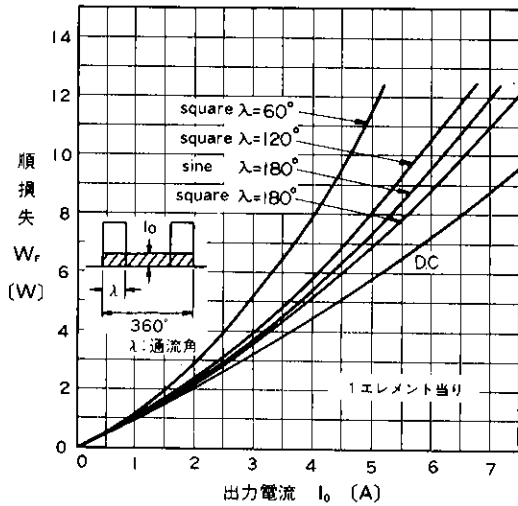
■特性曲線：Characteristics



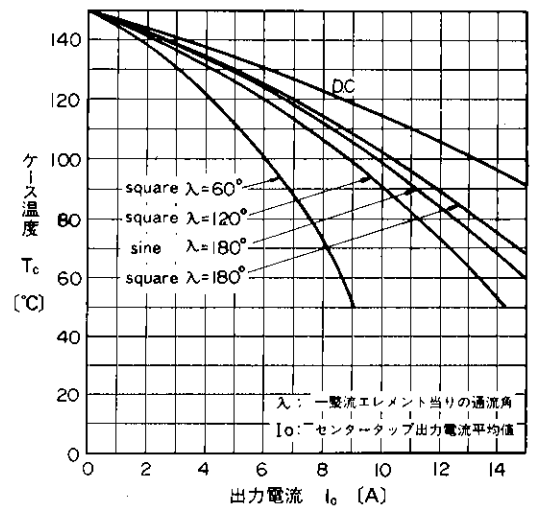
順特性 (代表特性)
Forward Characteristics



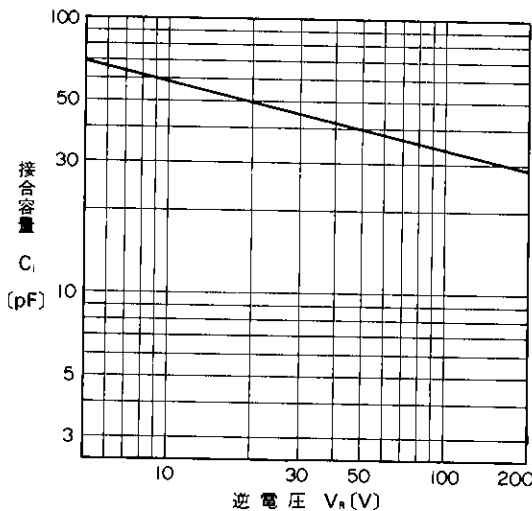
逆特性 (代表特性)
Reverse Characteristics



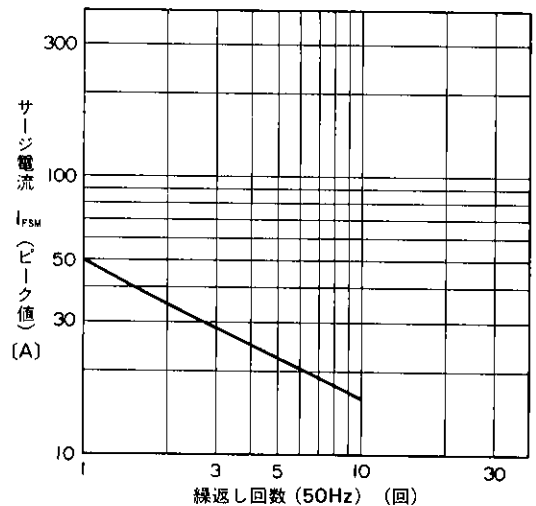
順損失特性 (代表特性)
Forward Power Dissipation



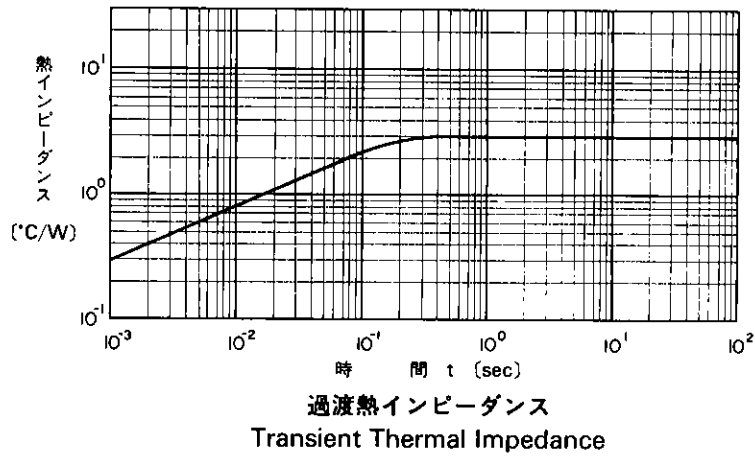
出力電流-ケース温度特性
Output Current-Case Temperature



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



サージ電流耐量
Surge Capability



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