

SE059(1.0A)

T-03-13

SCHOTTKY BARRIER DIODE

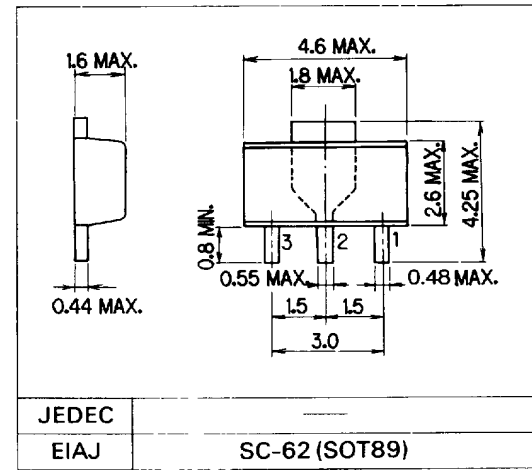
Features

- Surface mount device
- Low V_F
- Super high speed switching
- High reliability by planer design

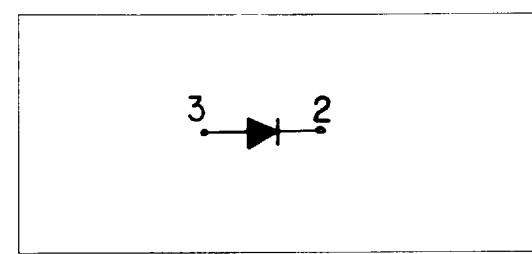
Applications

- High speed power switching

Outline Drawings



Connection Diagram



Maximum Ratings and Characteristics

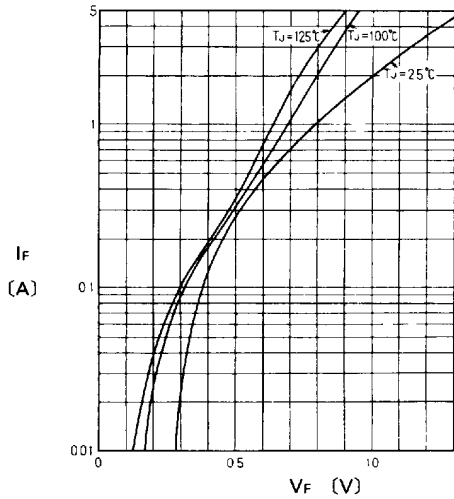
Absolute Maximum Ratings

Items	Symbols	Conditions	Ratings	Units
Repetitive Peak Reverse Voltage	V_{RRM}		90	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$t_w = 500ns$ duty = $\frac{1}{10}$	100	V
Average Output Current	I_O	Resistive Load $T_a = 25^\circ C$	1.0*	A
Surge Current	I_{FSM}	Sine wave 10ms	10	A
Operating Junction Temperature	T_j		-40 ~ +125	$^\circ C$
Storage Temperature	T_{stg}		-40 ~ +125	$^\circ C$

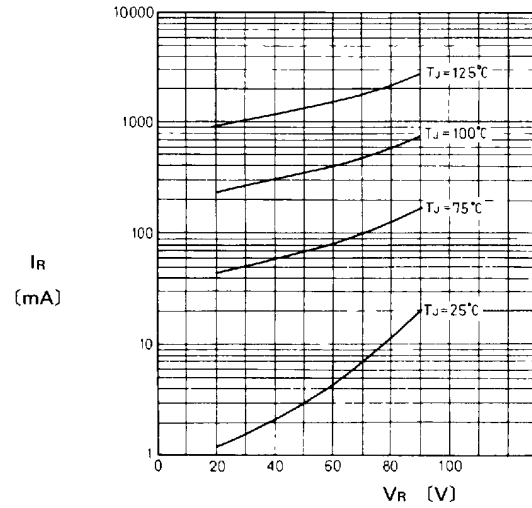
* Mounted to glass fabric base epoxy resin printed circuits

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

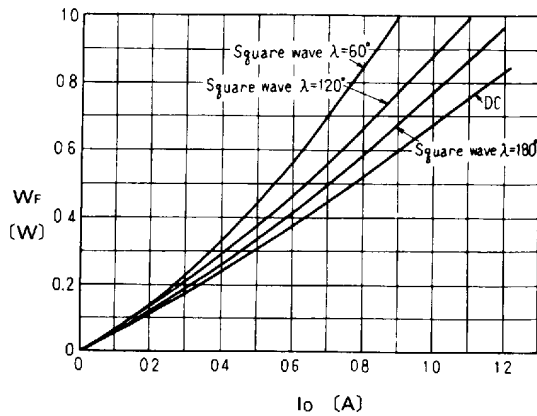
Items	Symbols	Conditions	Max.	Units
Forward Voltage Drop	V_{FM}	$I_{FM} = 1.0A$	0.85	V
Reverse Current	I_{RRM}	$V_R = V_{RRM}$	1.0	mA
Thermal Resistance	$R_{th(j-a)}$	junction to ambient	110*	$^\circ C/W$



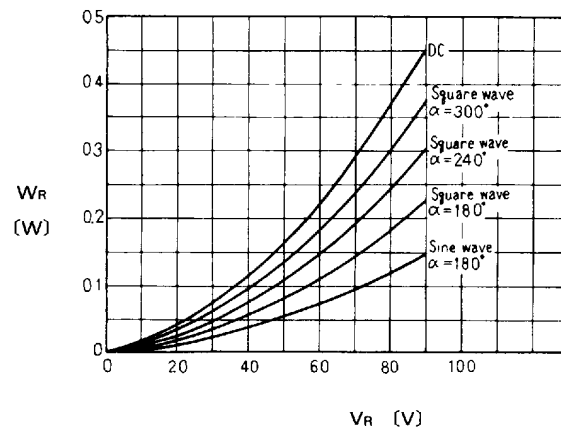
Forward Characteristics



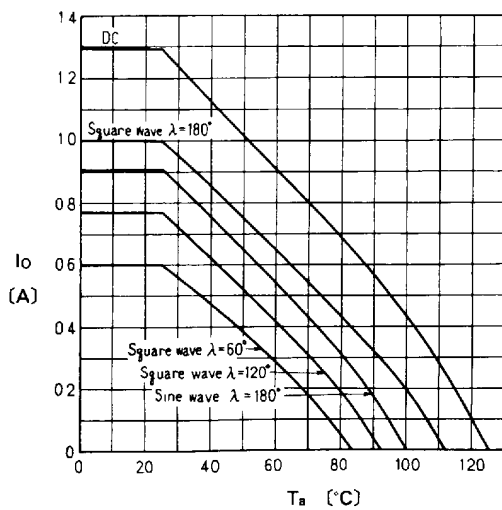
Reverse Characteristics



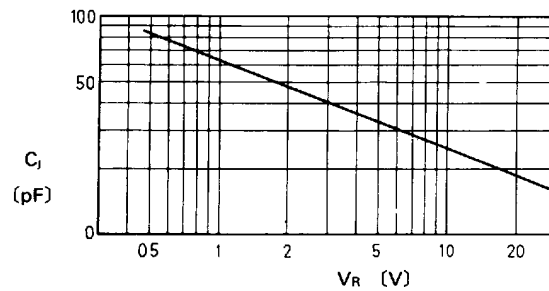
Forward Power Dissipation



Reverse Power Dissipation

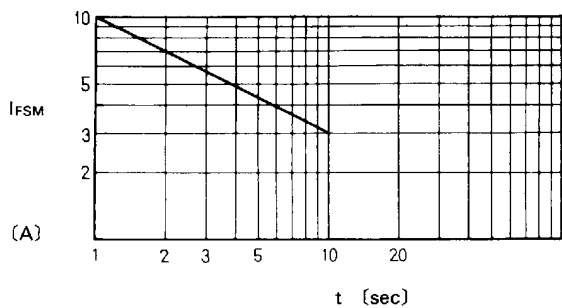


Current Derating ($I_o - T_a$)

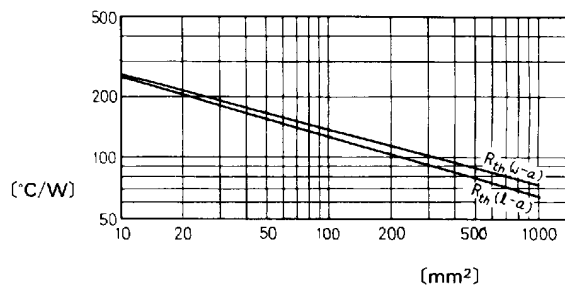


Junction Capacitance

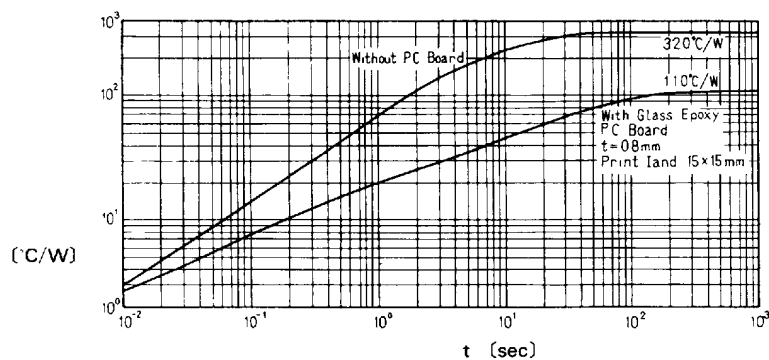
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Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance