

SL012(1.0A)

T.03-13

LOW LOSS SUPER HIGH SPEED RECTIFIER

Features

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

Applications

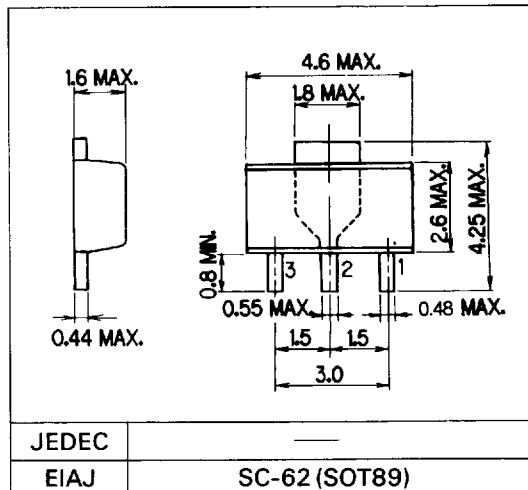
- High speed power switching.

Maximum Ratings and Characteristics

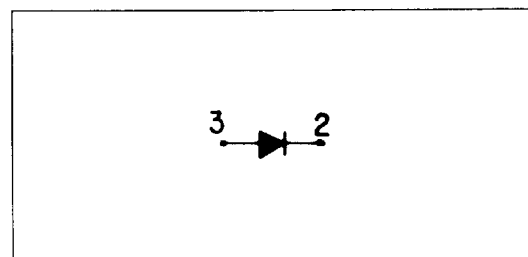
Absolute Maximum Ratings

Items	Symbols	Conditions	Ratings	Units
Repetitive Peak Reverse Voltage	V_{RRM}		200	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}		200	V
Average Output Current	I_O	$T_a = 35^\circ\text{C}$ Resistive load	1.0*	A
Surge Current	I_{FSM}	10ms Sine wave	10	A
Operating Junction Temperature	T_j		-40 ~ +150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-40 ~ +150	$^\circ\text{C}$

Outline Drawings



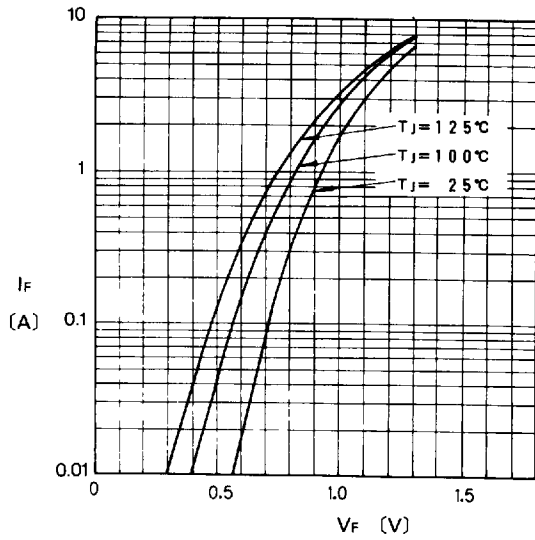
Connection Diagram



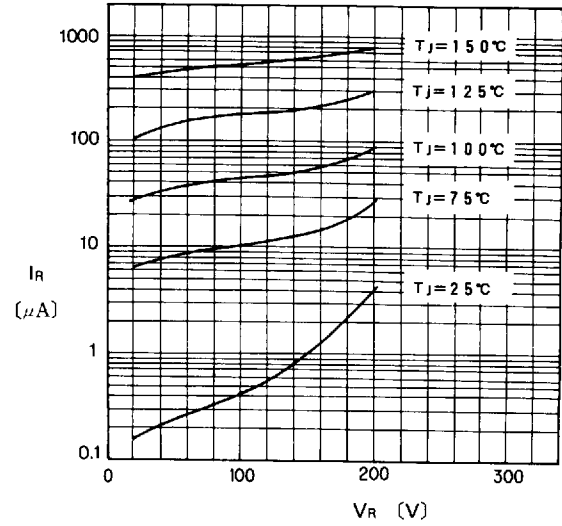
* Mounted to glass fabric base epoxy resin printed circuits

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

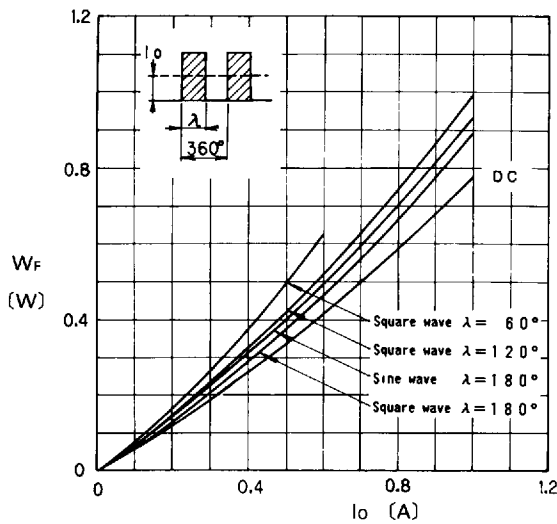
Items	Symbols	Conditions	Max.	Units
Forward Voltage Drop	V_{FM}	$I_{FM} = 1.0\text{A}$	0.98	V
Reverse Current	I_{RRM}	$V_R = V_{RRM}$	50	μA
Reverse Recovery Time	t_{rr}	$I_F = 0.1\text{A}, I_R = 0.2\text{A}, I_{rec} = 0.05\text{A}$	35	ns
Thermal Resistance	$R_{th(j-a)}$	junction to ambient	110*	$^\circ\text{C/W}$



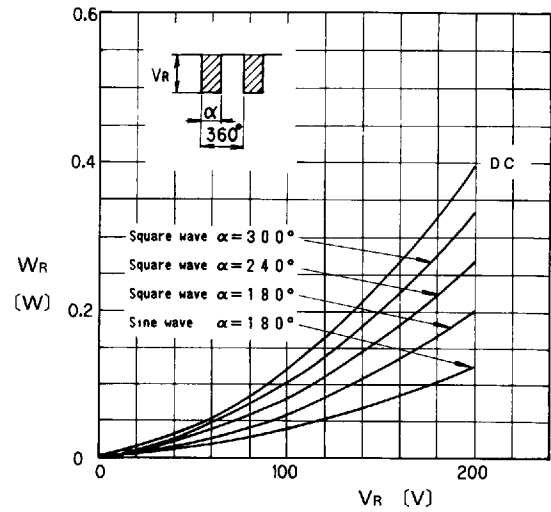
Forward Characteristics



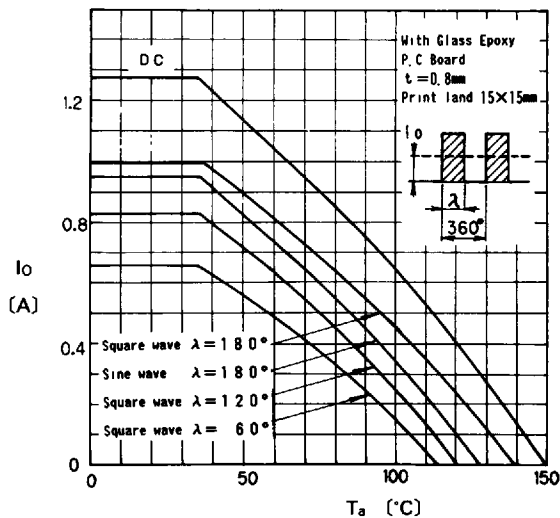
Reverse Characteristics



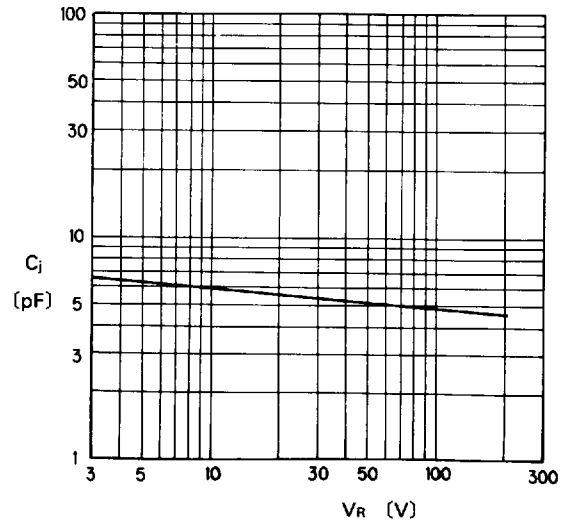
Forward Power Dissipation



Reverse Power Dissipation

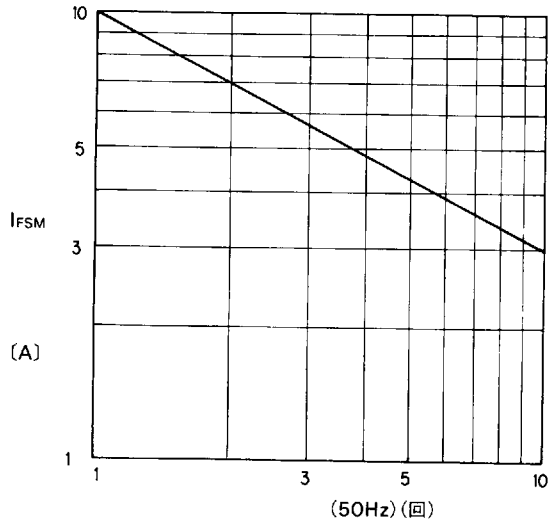


Current Derating (I_o - T_a)

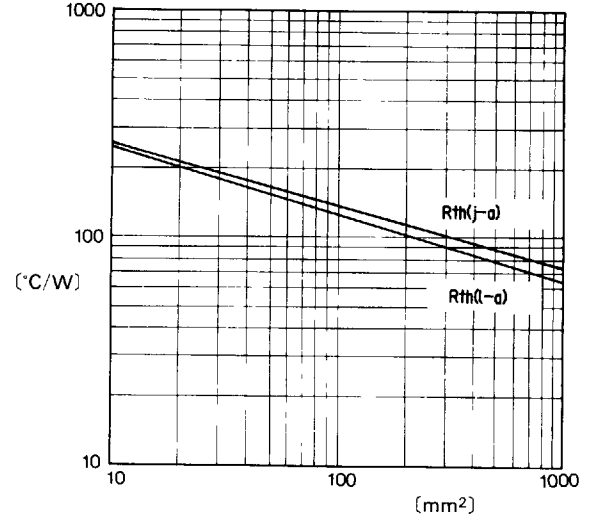


Junction Capacitance Characteristics

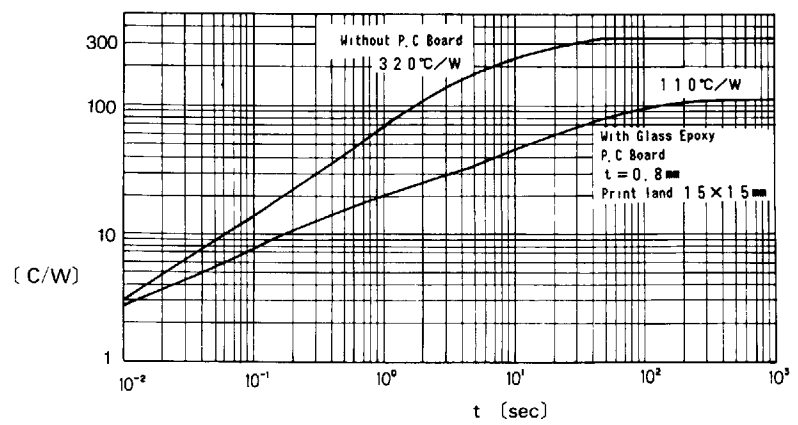
SL012(1.0A)



Surge Capability



Thermal Resistance Print Land



Transient Thermal Impedance