

SC902-2 (1.0A)

(200V / 1.0A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Features

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

Applications

- High speed switching

Maximum ratings and characteristics

- Absolute maximum ratings

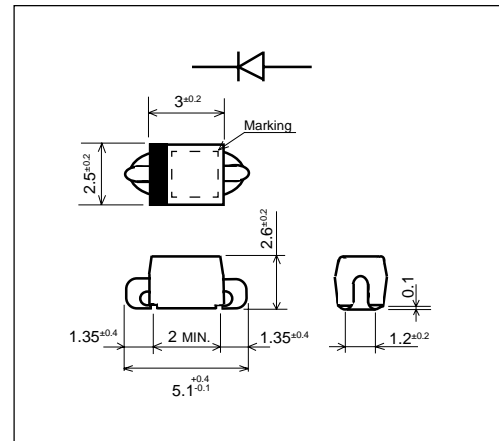
Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		200	V
Non-repetitive peak reverse voltage	V_{RSM}		200	V
Average output current	I_O	duty=1/2, $T_a=25^{\circ}\text{C}$ Square wave	1.0	A
Surge current	I_{FSM}	Sine wave 10ms $T_j=150^{\circ}\text{C}$	25	A
Operating junction temperature	T_j		-40 to +150	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}\text{C}$

* Mounted to glass fabric base epoxy resin printed circuits

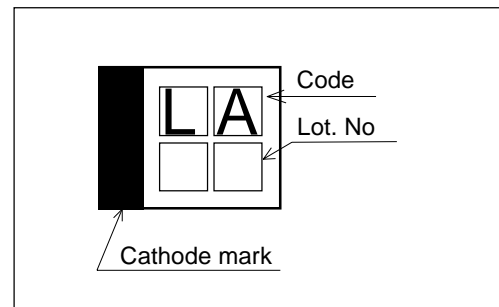
- Electrical characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=1.0\text{A}$	1.05	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	120*	$^{\circ}\text{C}/\text{W}$

Outline drawings, mm

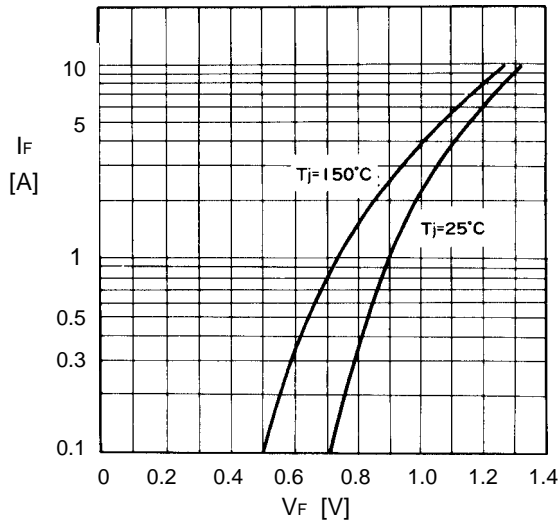


Marking

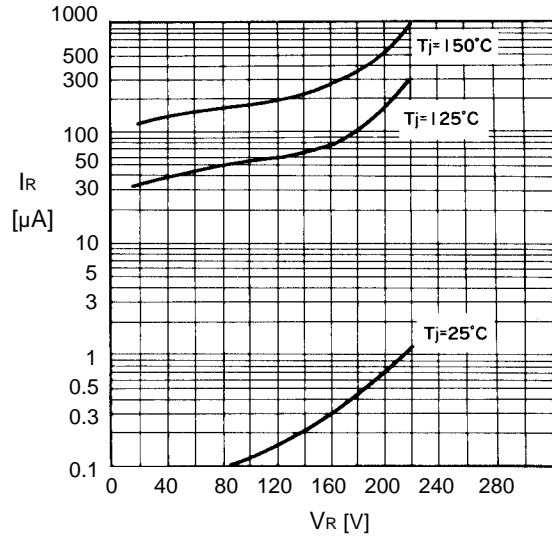


■ Characteristics

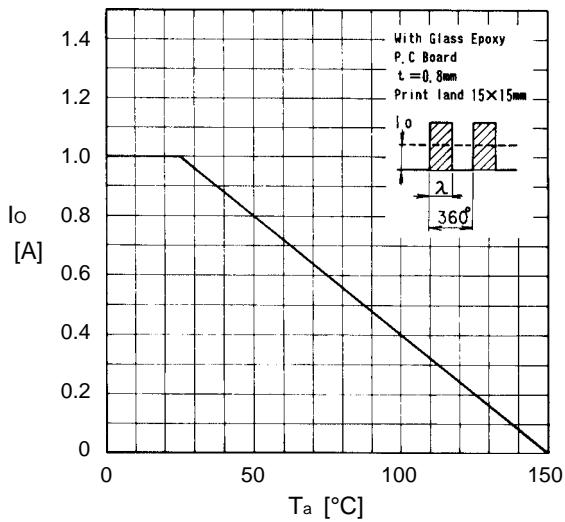
Forward characteristics



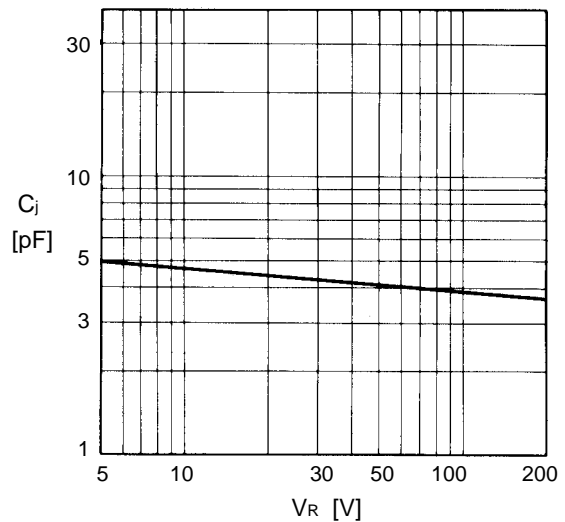
Reverse characteristics



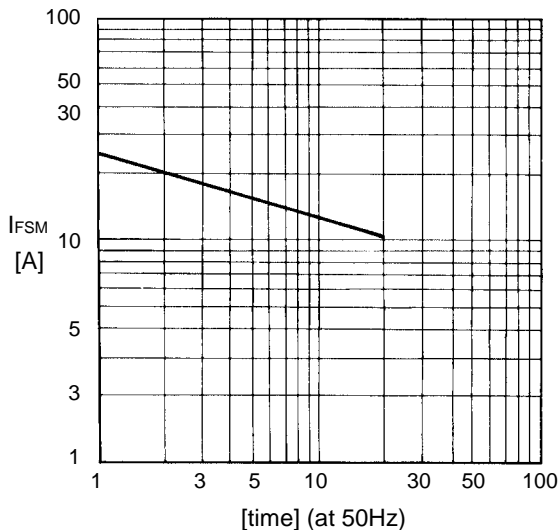
Current derating (I_o - T_a)



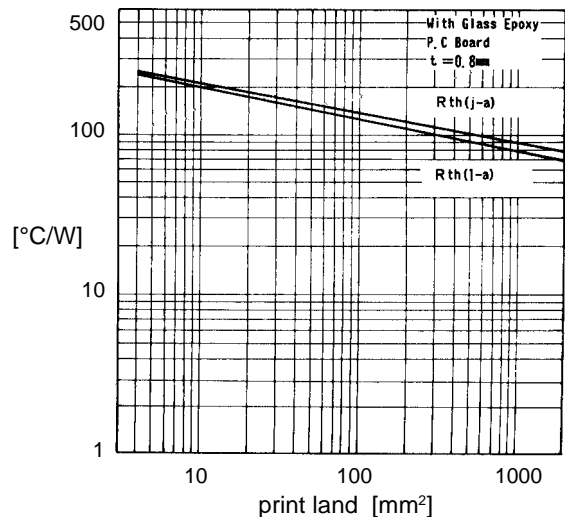
Junction capacitance characteristics



Surge capability



Thermal resistance print land



Transient thermal impedance

