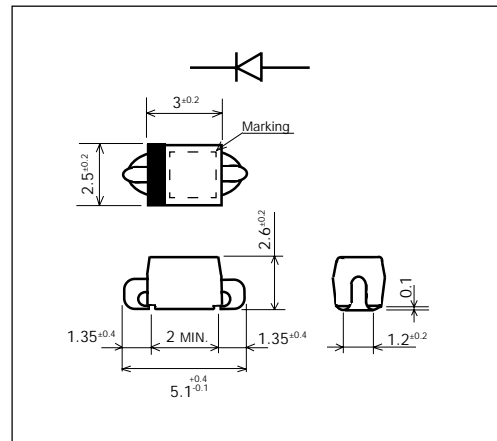


SC802-09 (1A)

(90V / 1A)

SCHOTTKY BARRIER DIODE

Outline drawings, mm



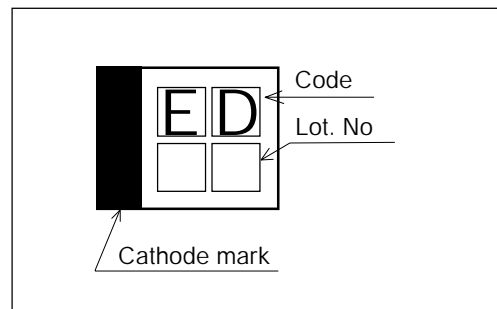
Features

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

Applications

- High speed switching

Marking



Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		90	V
Non-repetitive peak reverse voltage	V_{RSM}	$t_w=500\text{ns}$, $\text{duty}=1/40$	100	V
Average output current	I_o	Resistive load $T_I=110^\circ\text{C}$	1.0*	A
Surge current	I_{FSM}	Sine wave 10ms	30	A
Operating junction temperature	T_j		-40 to +150	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

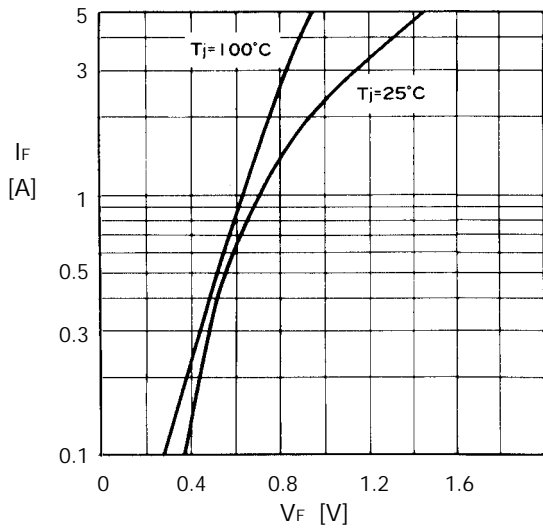
* Mounted on printed circuit board (15 x 15mm)

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

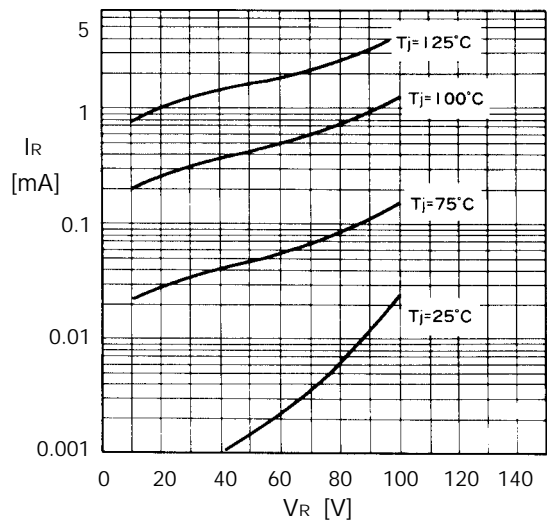
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=1\text{A}$	0.85	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	2.0	mA
Thermal resistance	$R_{th(j-l)}$	Junction to lead	15*	$^\circ\text{C}/\text{W}$

■ Characteristics

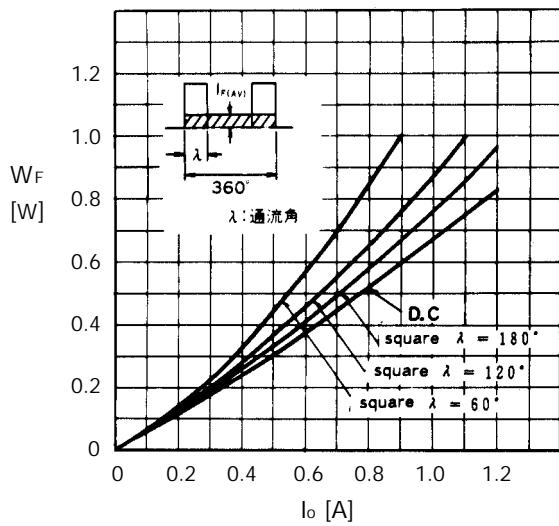
Forward characteristics



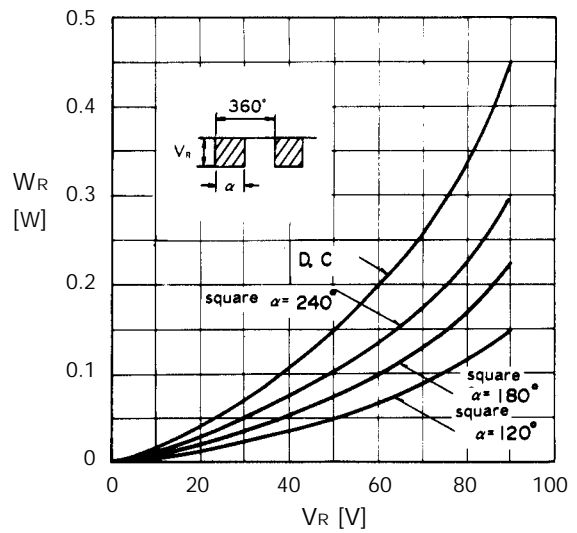
Reverse characteristics



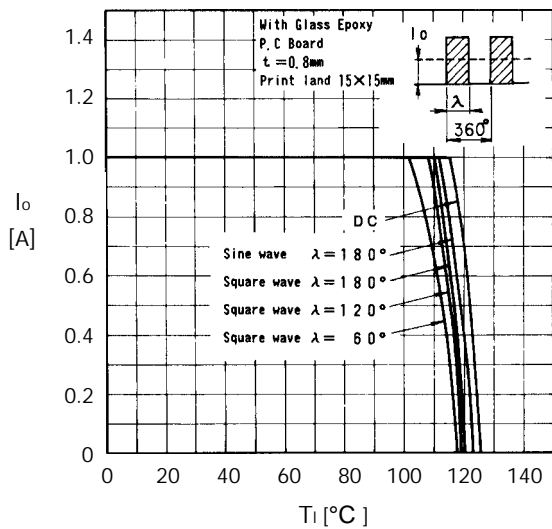
Forward power dissipation



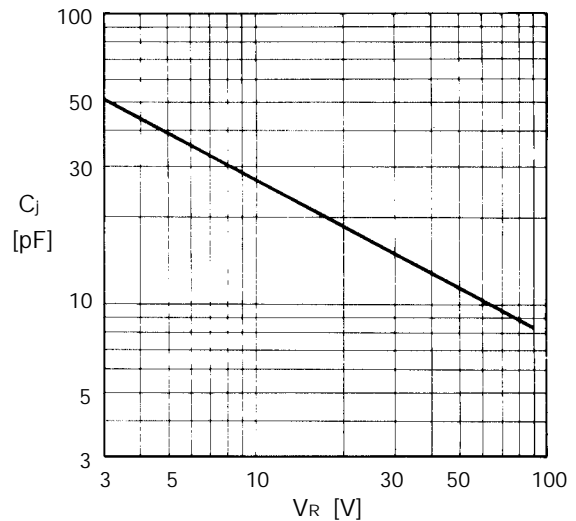
Reverse power dissipation



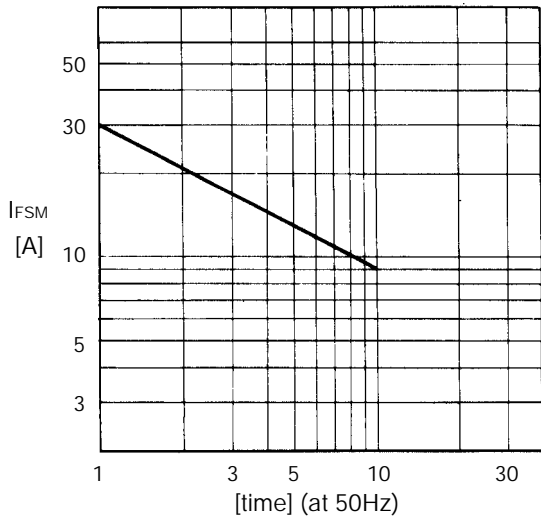
Current derating ($I_o - T_I$)



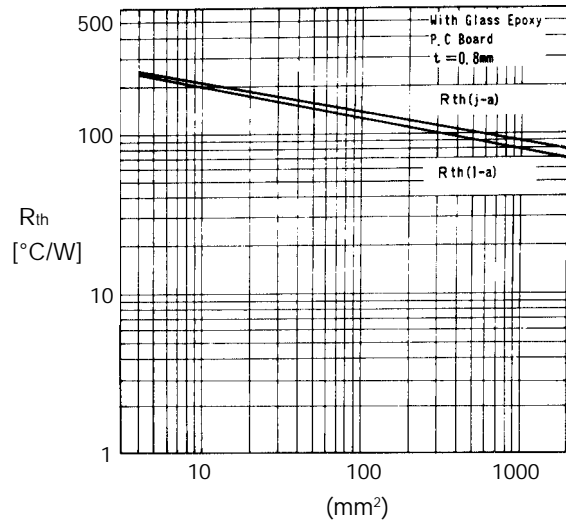
Junction capacitance characteristics



Surge capability



Thermal resistance print land



Transient thermal impedance

