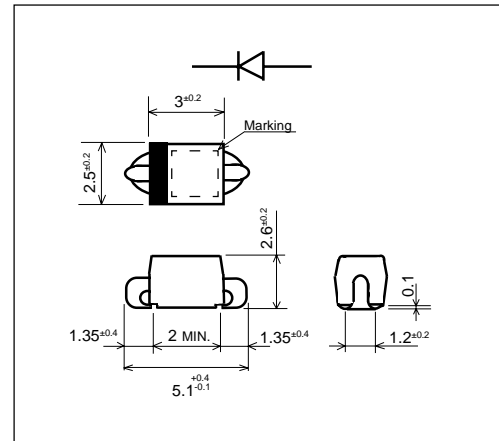


SC311 (0.5A)

(400V to 600V / 0.5A)

FAST RECOVERY DIODE

■ Outline drawings, mm



■ Features

- Surface mount device
- High voltage by mesa design
- High reliability

■ Applications

- High speed switching

■ Maximum ratings and characteristics

- Absolute maximum ratings

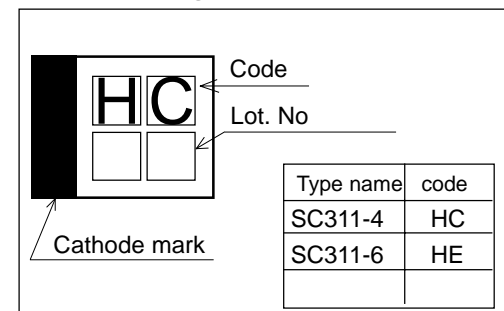
Item	Symbol	Conditions	Rating		Unit
			-04	-06	
Repetitive peak reverse voltage	V_{RRM}		400	600	V
Non-repetitive peak reverse voltage	V_{RSM}		400	600	V
Average output current	I_o	Resistive load ($T_a=25^\circ\text{C}$)	0.5*		A
Surge current	I_{FSM}	Sine wave 10ms	10		A
Operating junction temperature	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, land (15mm x 15mm)

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

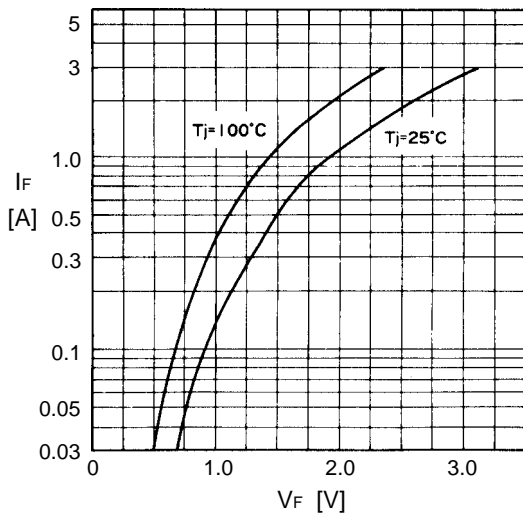
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=0.5\text{A}$	2.5	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	50	μA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.2\text{A}$, $I_{rec}=0.05\text{A}$	50	ns
Thermal resistance	$R_{th(j-a)}$	Junction to ambient	120*	$^\circ\text{C/W}$

■ Marking

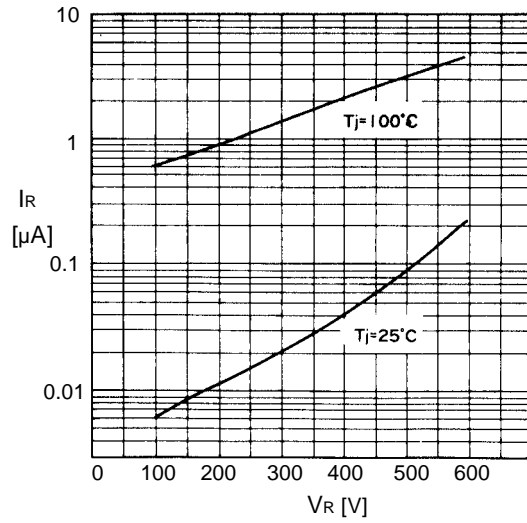


Characteristics

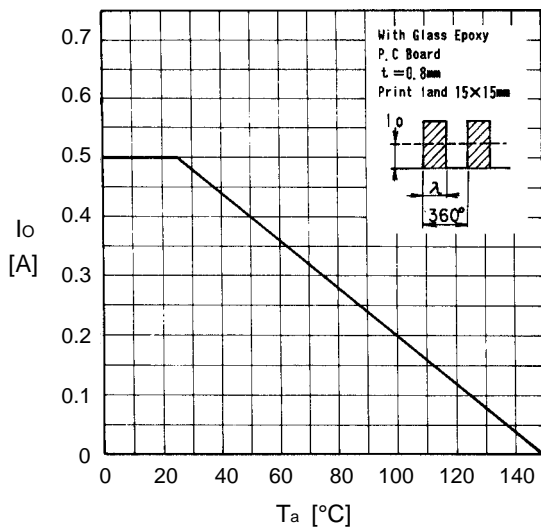
Forward characteristics



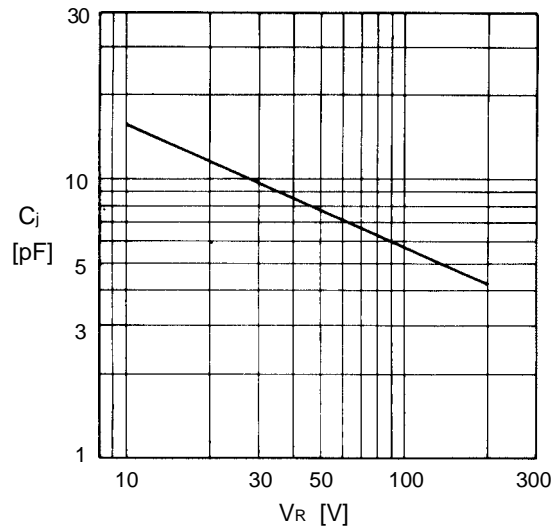
Reverse characteristics



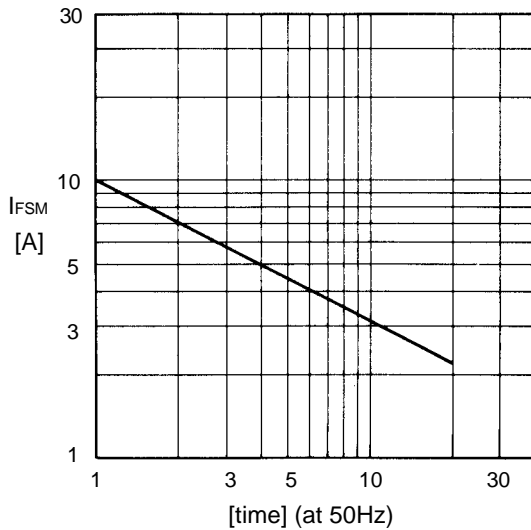
Current derating ($I_o - T_a$)



Junction capacitance characteristics



Surge capability



Thermal resistance print land

