

# SC201 (0.5A)

( 200V to 600V / 0.5A )

## FAST RECOVERY DIODE

### Features

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

### Applications

- High speed switching

### Maximum ratings and characteristics

- Absolute maximum ratings

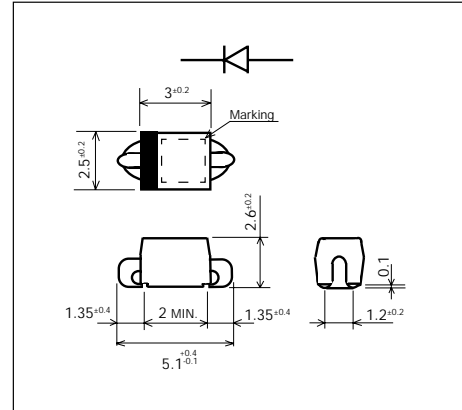
Item	Symbol	Conditions	Rating			Unit
			-02	-04	-06	
Repetitive peak reverse voltage	$V_{RRM}$		200	400	600	V
Non-repetitive peak reverse voltage	$V_{RSM}$		200	400	600	V
Average output current	$I_o$	Resistive load ( $T_a=40^\circ\text{C}$ )	0.5*			A
Surge current	$I_{FSM}$	Sine wave 10ms	10			A
Operating junction temperature	$T_j$		-40 to +140			$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +140			$^\circ\text{C}$

\*Mounted to glass fabric base epoxy resin printed circuits, land (15mm x 15mm)

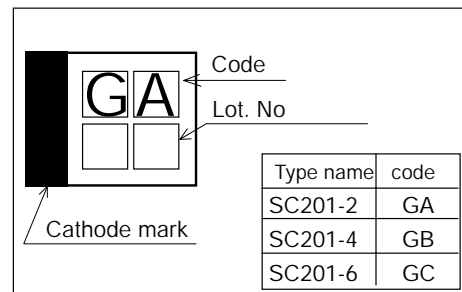
- Electrical characteristics ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_{FM}$	$I_{FM}=0.5\text{A}$	1.5	V
Reverse current	$I_{RRM}$	$V_R=V_{RRM}$	10	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=0.1\text{A}, I_R=0.1\text{A}$	400	ns
Thermal resistance	$R_{th(j-a)}$	Junction to ambient	120*	$^\circ\text{C/W}$

### Outline drawings, mm

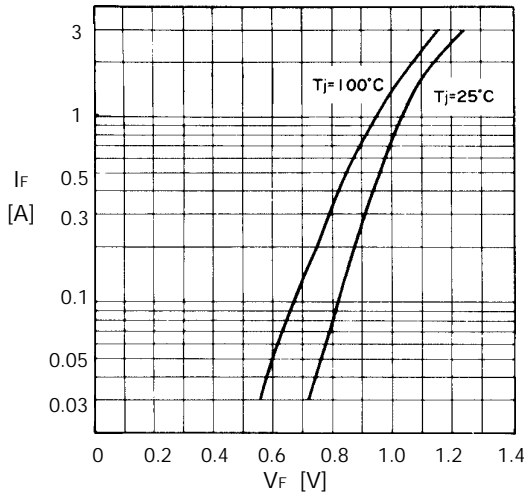


### Marking

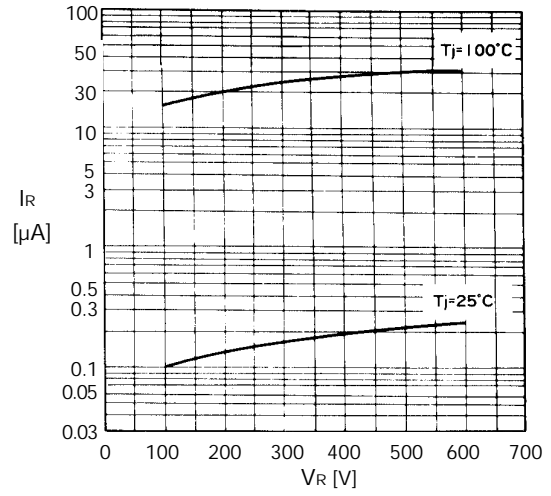


■ Characteristics

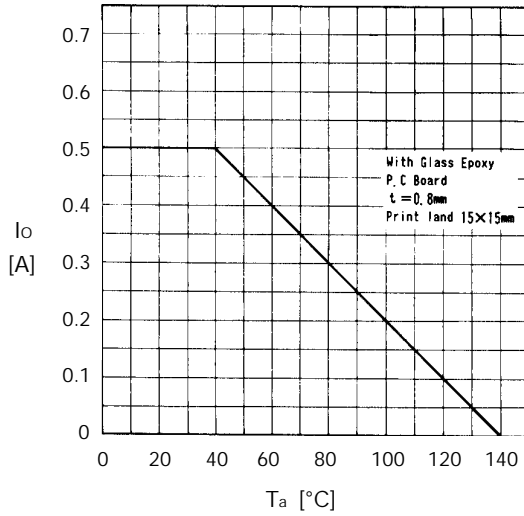
Forward characteristics



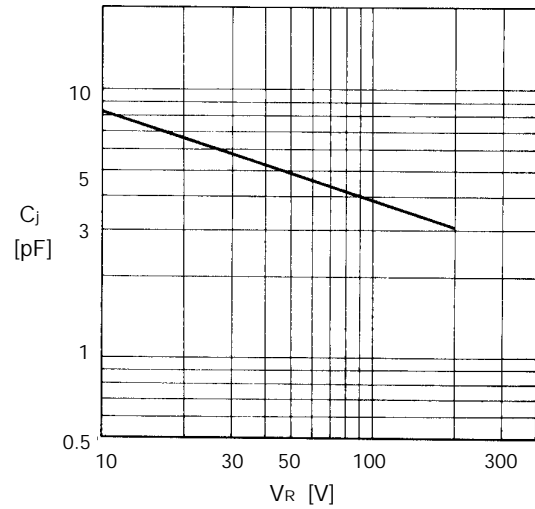
Reverse characteristics



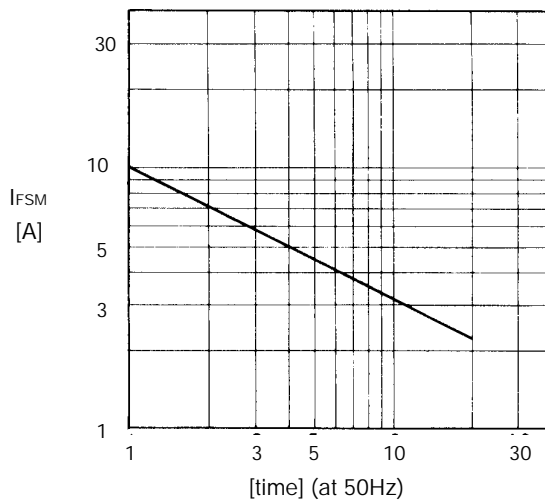
Current derating ( $I_o - T_a$ )



Junction capacitance characteristics



Surge capability



Thermal resistance print land

