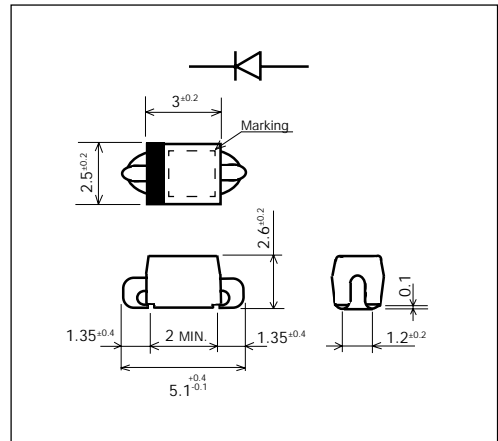


SC201 (0.5A)

(200V 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

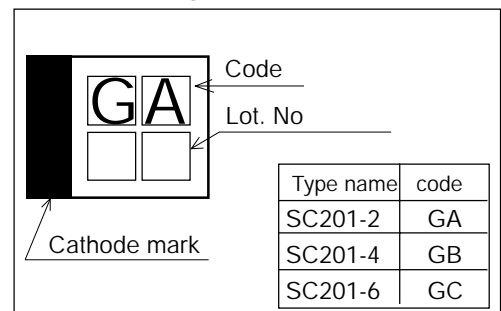
| Item | Symbol | Conditions | Rating | | | Unit |
|-------------------------------------|-----------|---|-------------|-----|-----|------------------|
| | | | -02 | -04 | -06 | |
| Repetitive peak reverse voltage | V_{RRM} | | 200 | 400 | 600 | V |
| Non-repetitive peak reverse voltage | V_{RSM} | | 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)

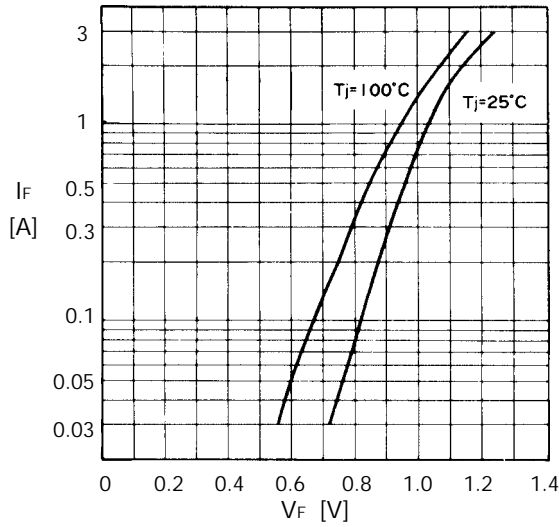
| Item | Symbol | Conditions | Max. | Unit |
|-----------------------|---------------|---------------------------------------|------|--------------------|
| Forward voltage drop | V_{FM} | $I_{FM}=0.5\text{A}$ | 1.5 | V |
| Reverse current | I_{RRM} | $V_R=V_{RRM}$ | 10 | μA |
| Reverse recovery time | 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* | $^\circ\text{C/W}$ |

Marking

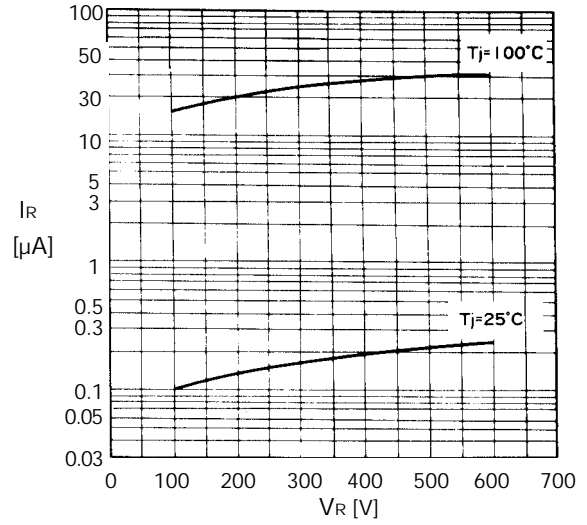


Characteristics

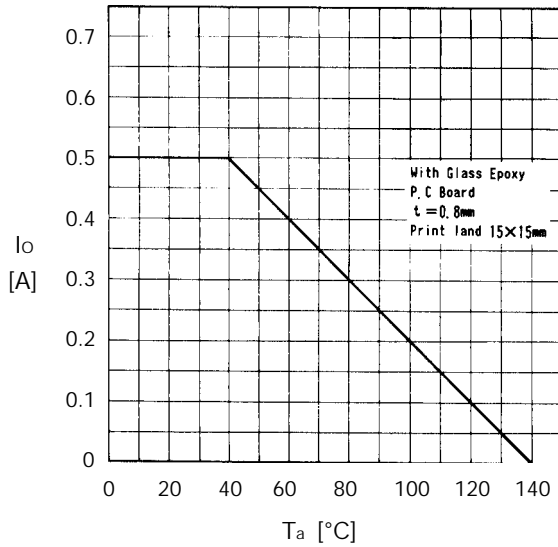
Forward characteristics



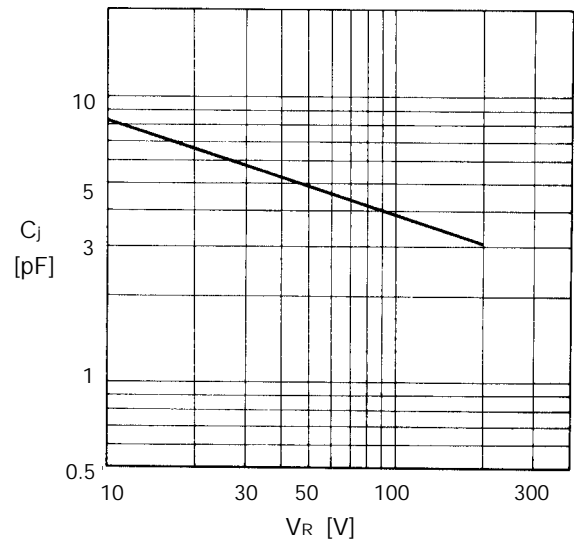
Reverse characteristics



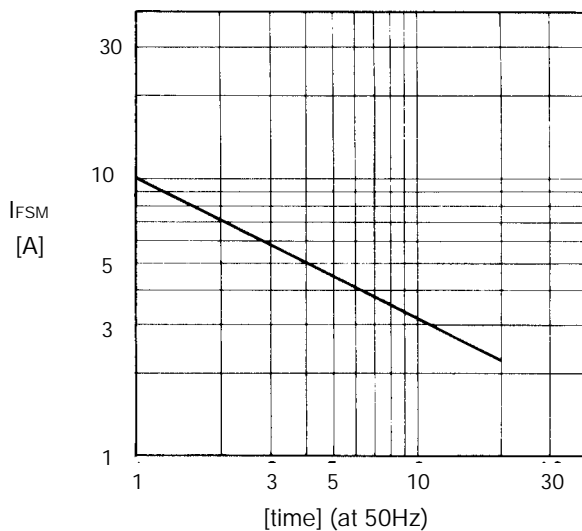
Current derating ($I_o - T_a$)



Junction capacitance characteristics



Surge capability



Thermal resistance print land

