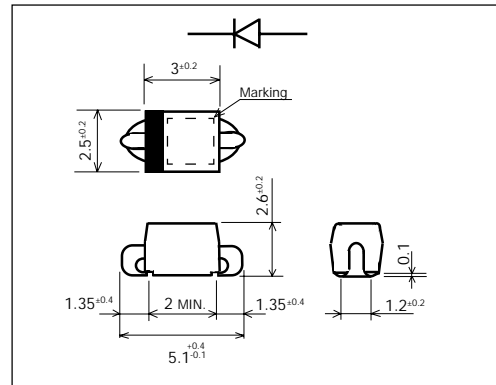


# SC017 (1.0A)

(200V to 400V / 1.0A)

## GENERAL USE RECTIFIER DIODE

### Outline drawings



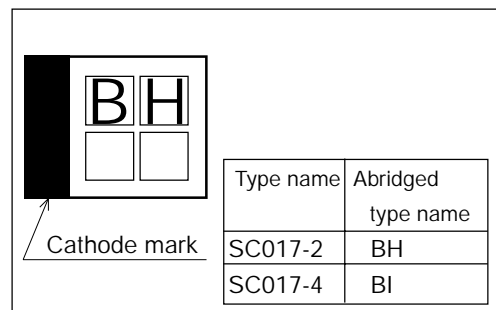
### Features

- ESD-proof
- Surface-mount device
- High reliability

### Applications

- General purpose rectifier applications
- Automobile use

### Marking



### Maximum ratings and characteristics

- Absolute maximum ratings

| Item                                | Symbol    | Conditions                            | Rating      |     | Unit             |
|-------------------------------------|-----------|---------------------------------------|-------------|-----|------------------|
|                                     |           |                                       | - 2         | - 4 |                  |
| Repetitive peak reverse voltage     | $V_{RRM}$ |                                       | 200         | 400 | V                |
| Non-repetitive peak reverse voltage | $V_{RSM}$ |                                       | 200         | 400 | V                |
| Average output current              | $I_o$     | Resistive load $T_a=40^\circ\text{C}$ | 1.0 *       |     | A                |
| Surge current                       | $I_{FSM}$ | Sine wave 10ms                        | 40          |     | A                |
| Operating junction temperature      | $T_j$     |                                       | -40 to +150 |     | $^\circ\text{C}$ |
| Storage temperature                 | $T_{stg}$ |                                       | -40 to +150 |     | $^\circ\text{C}$ |

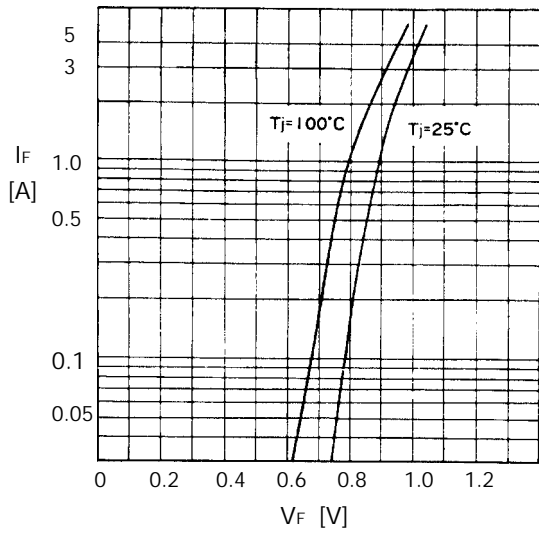
\* Mounted to glass fabric base epoxy resin printed circuits, land (15mm x 15mm)

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

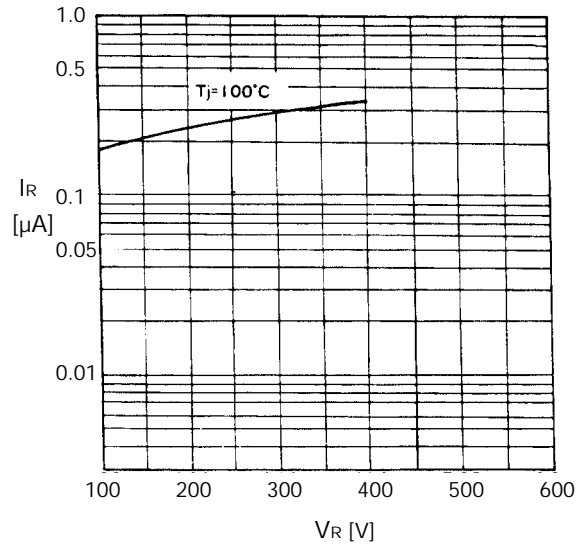
| Item                 | Symbol        | Conditions           | Max. | Unit               |
|----------------------|---------------|----------------------|------|--------------------|
| Forward voltage drop | $V_{FM}$      | $I_{FM}=2.0\text{A}$ | 1.1  | V                  |
| Reverse current      | $I_{RRM}$     | $V_R=V_{RRM}$        | 10   | $\mu\text{A}$      |
| Thermal resistance   | $R_{th(j-a)}$ | Junction to ambient  | 120* | $^\circ\text{C/W}$ |

■ Characteristics

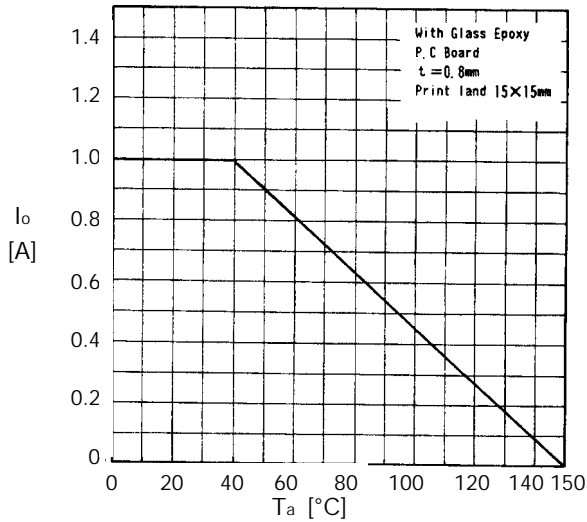
Forward characteristics



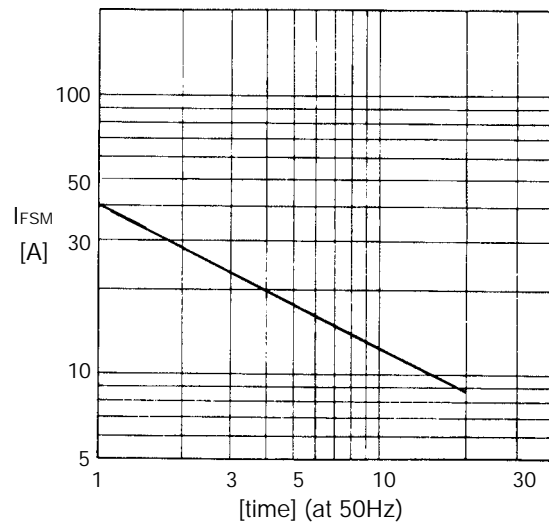
Reverse characteristics



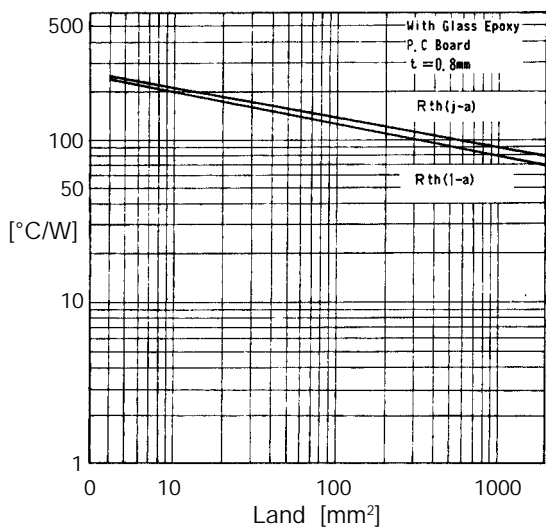
Current derating ( $I_o$ - $T_a$ )



Surge capability



Thermal resistance print land



Transient thermal impedance

