

## CDSV3-4148-G / 4448-G

**Reverse Voltage: 75 Volts**

**Forward Current: 200mA**

**RoHS Device**



### Features

Designed for mounting on small surface.

High speed switching.

High mounting capability, strong surge withstand, high reliability.

Also available in other standard case styles: CDSF4148/4448 - 1005 size  
CDSU4148/4448 - 0603 size

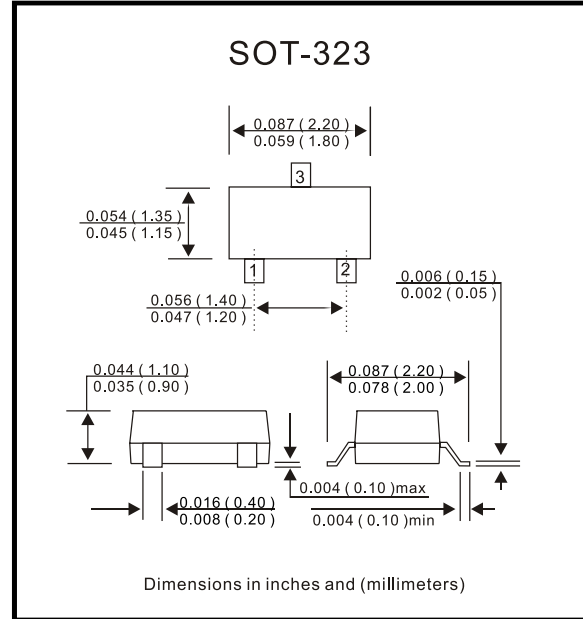
### Mechanical data

Case: SOT-323 molded plastic.

Terminals: Solder plated, solderable per MIL-STD-750, method 208.

Polarity: Indicated by cathode band.

Approx. weight: 0.006 gram



### Maximum Ratings and Electrical Characteristics

( at Ta = 25°C unless otherwise noted )

| Parameter                           | Condition                                                                        | Symbol           | CDSV3-4148-G | CDSV3-4448-G   | Unit |
|-------------------------------------|----------------------------------------------------------------------------------|------------------|--------------|----------------|------|
| Repetitive peak reverse voltage     |                                                                                  | V <sub>RRM</sub> | 75           |                | V    |
| Reverse voltage                     |                                                                                  | V <sub>R</sub>   | 75           |                | V    |
| Forward current                     |                                                                                  | I <sub>F</sub>   | 200          |                | mA   |
| Surge peak forward current          | T = 1us                                                                          | I <sub>FSM</sub> | 2            | 4              | A    |
| Power dissipation                   |                                                                                  | P <sub>d</sub>   | 200          |                | mW   |
| Maximum forward voltage             | @ I <sub>F</sub> = 5 mA<br>@ I <sub>F</sub> = 50 mA<br>@ I <sub>F</sub> = 100 mA | V <sub>F</sub>   | -<br>1<br>-  | 0.72<br>-<br>1 | V    |
| Maximum reverse current             | @ V <sub>R</sub> = 75V<br>@ V <sub>R</sub> = 25V                                 | I <sub>R</sub>   | 2.5<br>0.025 |                | uA   |
| Max reverse recovery time           | I <sub>F</sub> =10mA, R=100 ohms                                                 | T <sub>rr</sub>  | 4            |                | nS   |
| Max diode capacitance               | V <sub>R</sub> =0V, f=1MHz                                                       | C <sub>T</sub>   | 4            |                | pF   |
| Max. operation junction temperature |                                                                                  | T <sub>j</sub>   | 125          |                | °C   |
| Storage temperature                 |                                                                                  | T <sub>STG</sub> | -55 to +125  |                | °C   |

## RATING AND CHARACTERISTIC CURVES (CDSV3-4148-G/4448-G)

Fig. 1 - Forward characteristics

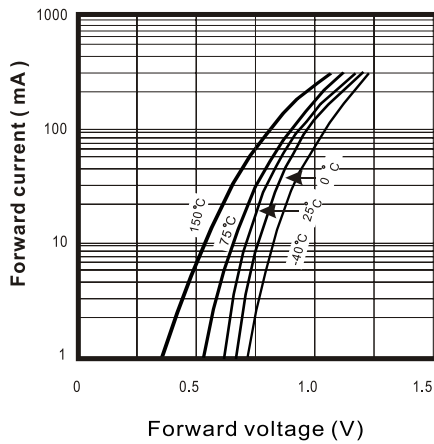


Fig. 2 - Reverse characteristics

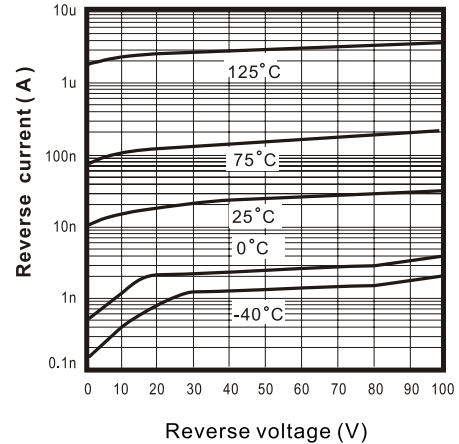


Fig. 3 - Capacitance between terminals characteristics

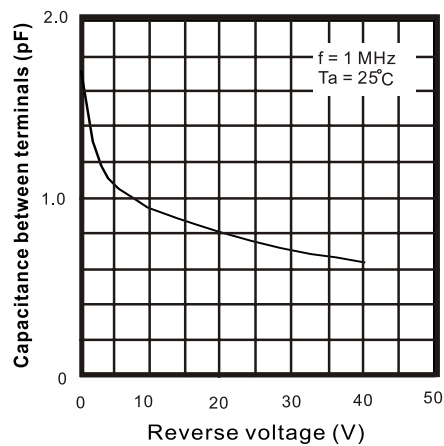


Fig. 4 - Power Derating Curve

