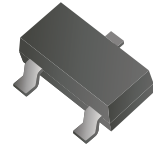


## CDSV3-4148-G/4448-G

Reverse Voltage: 75 Volts

Forward Current: 200 mA

RoHS Device



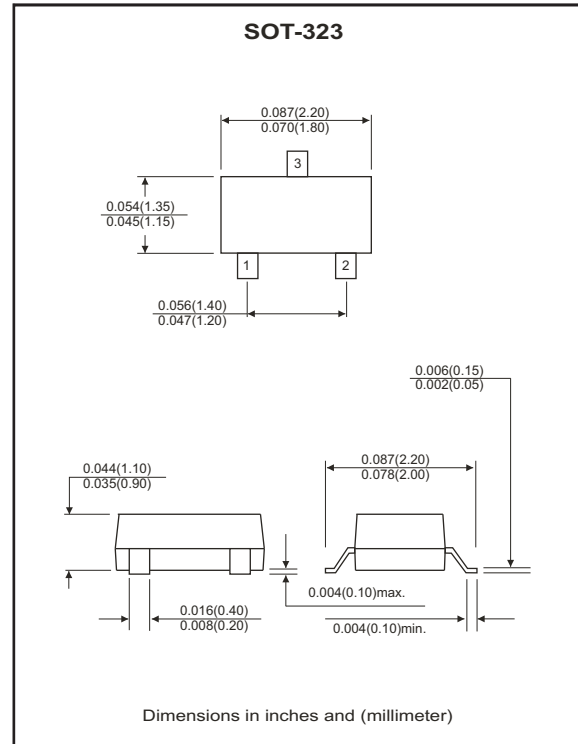
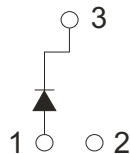
### Features

- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.
- Also available in other standard case:  
CDSF4148/4448 - 1005 size  
CDSU4148/4448 - 0603 size

### Mechanical data

- Case: SOT-323, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.006 grams

### Circuit diagram



### Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

| Parameter                       | Symbol    | Conditions                                      | CDSV3-4148-G | CDSV3-4448-G   | Units   |
|---------------------------------|-----------|---|--------------|----------------|---------|
| Repetitive peak reverse voltage | $V_{RRM}$ |   | 75           |                | V       |
| Reverse voltage                 | $V_R$     |   | 75           |                | V       |
| Forward current                 | $I_F$     |   | 200          |                | mA      |
| Peak surge forward current      | $I_{FSM}$ | T=1.0 $\mu$ S                                   | 2            | 4              | A       |
| Power dissipation               | $P_d$     |   | 200          |                | mW      |
| Maximum forward voltage         | $V_F$     | @ $I_F=5$ mA<br>@ $I_F=50$ mA<br>@ $I_F=100$ mA | -<br>1<br>-  | 0.72<br>-<br>1 | V       |
| Maximum reverse current         | $I_R$     | @ $V_R=75$ V<br>@ $V_R=25$ V                    | 2.5<br>0.025 |                | $\mu$ A |
| Maximum reverse recovery time   | $T_{rr}$  | $I_F=I_R=10$ mA, $R_L=100\Omega$                | 4            |                | nS      |
| Typical diode capacitance       | $C_J$     | $V_R=0$ V, f=1.0MHz                             | 4            |                | pF      |
| Maximum junction temperature    | $T_J$     |   | 125          |                | °C      |
| Storage temperature             | $T_{STG}$ |   | -55 to +125  |                | °C      |

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

Fig.1 - Forward Characteristics

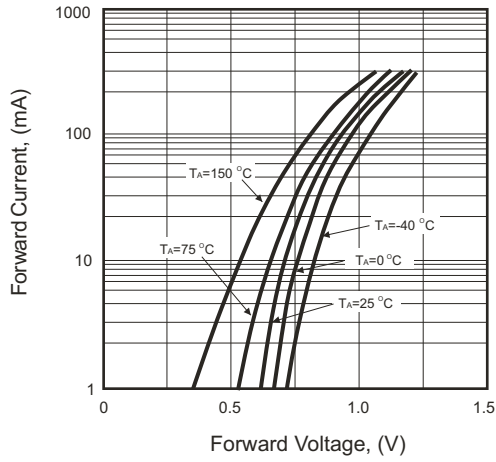


Fig.2 - Reverse Characteristics

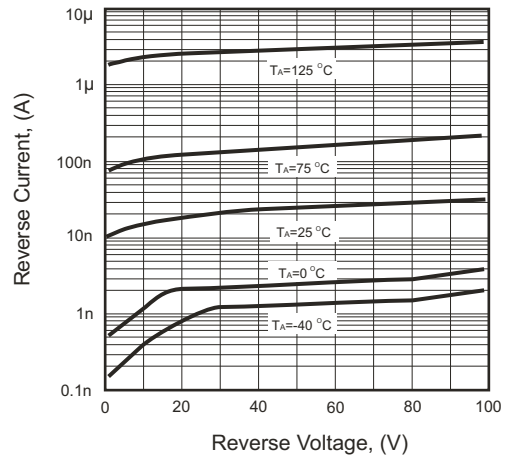


Fig.3 - Capacitance Between Terminals Characteristics

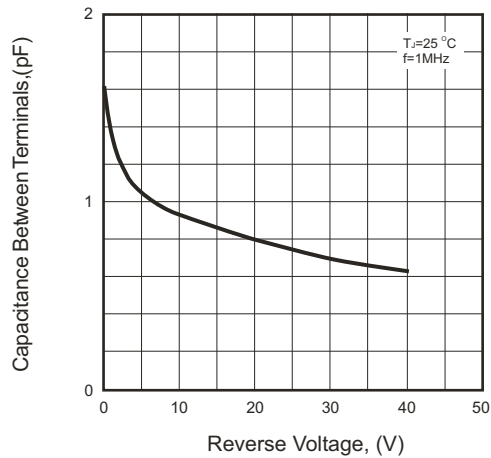


Fig.4 - Power Derating Curve

