

Small Signal Switching Diodes

Comchip
SMD Diode Specialist

CDSV6-4448TI/AQ/AD/CD/SD-G

Reverse Voltage: 80 Volts
Forward Current: 500 mA
RoHS Device

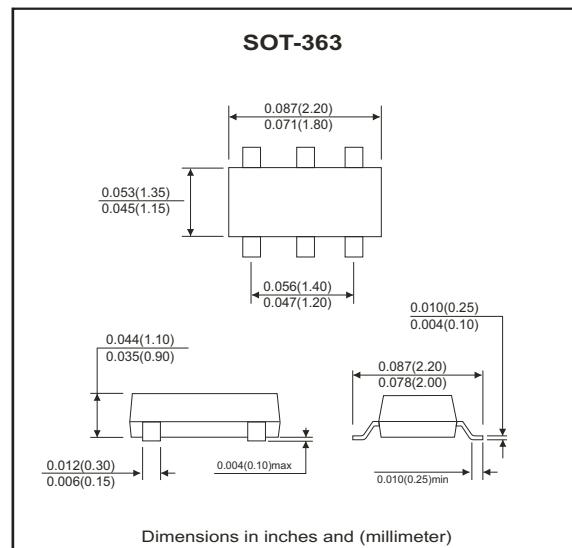


Features

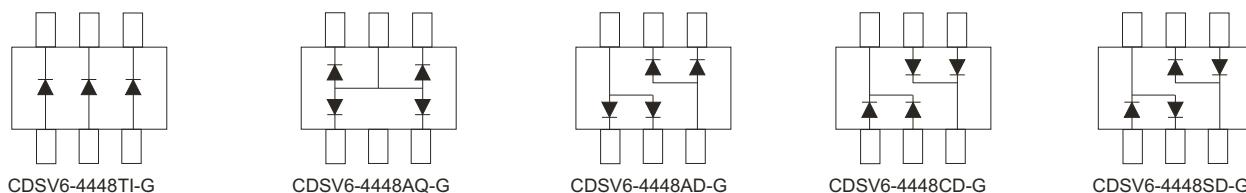
- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

Mechanical data

- Case: SOT-363, 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 | Value | Units |
|---------------------------------|------------------|--|------------------------------|-------|
| Repetitive peak reverse voltage | V _{RRM} | | 80 | V |
| Reverse voltage | V _R | | 80 | V |
| Forward current | I _F | | 500 | mA |
| Peak surge forward current | I _{FSM} | T=1.0 μS | 2 | A |
| Power dissipation | P _D | | 200 | mW |
| Maximum forward voltage | V _F | @I _F =1mA @I _F =10mA @I _F =100mA @I _F =150mA | 0.72 0.855 1.0 1.25 | V |
| Maximum reverse current | I _R | @V _R =20V @V _R =75V @V _R =25V, T _J =150 °C @V _R =75V, T _J =150 °C | 0.025 0.1 30 50 | μA |
| Maximum reverse recovery time | T _{rr} | I _f =5mA, V _R =6V | 4 | nS |
| Typical diode capacitance | C _T | V _R =6V, f=1.0MHz | 3.5 | pF |
| Maximum junction temperature | T _J | | 150 | °C |
| Storage temperature | T _{STG} | | -55 to +150 | °C |

REV:A

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RATING AND CHARACTERISTIC CURVES (CDSV6-4448TI/AQ/AD/CD/SD-G)

Fig.1 - Forward Characteristics

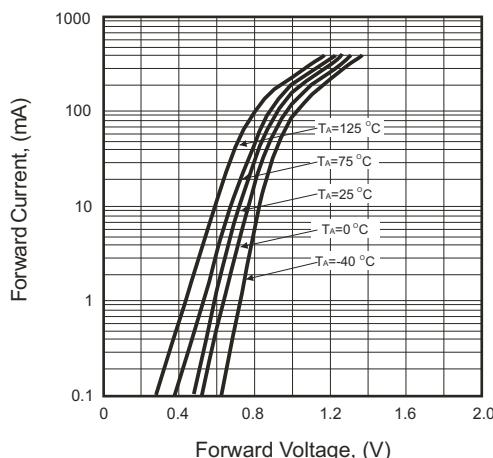


Fig.2 - Reverse Characteristics

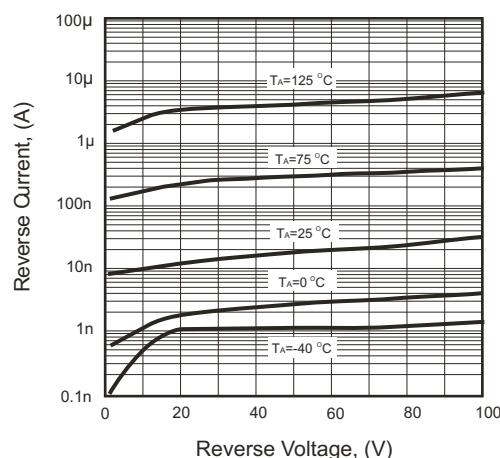


Fig.3 - Capacitance Between Terminals Characteristics

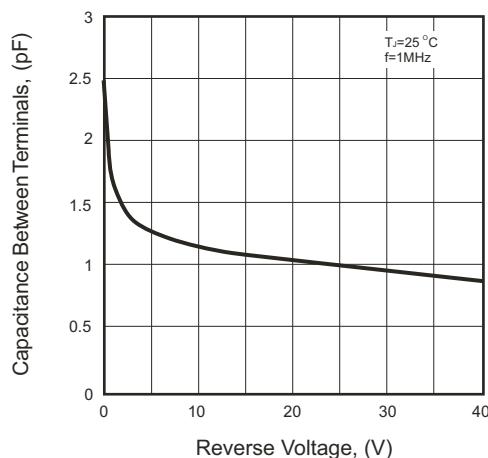


Fig.4 - Power Derating Curve

