

Small Signal Switching Diodes

COMCHIP
SMD Diodes Specialist

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

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

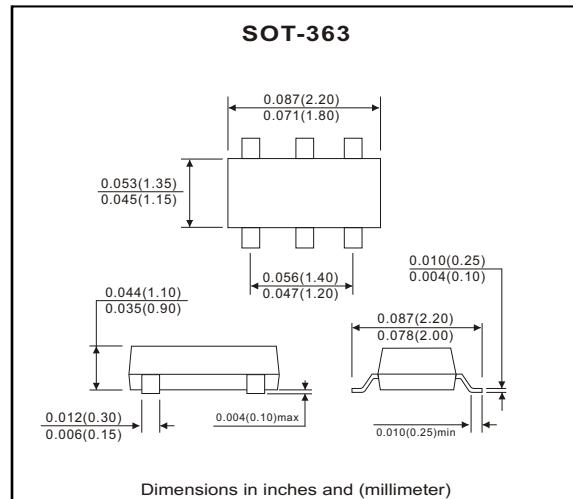


Features

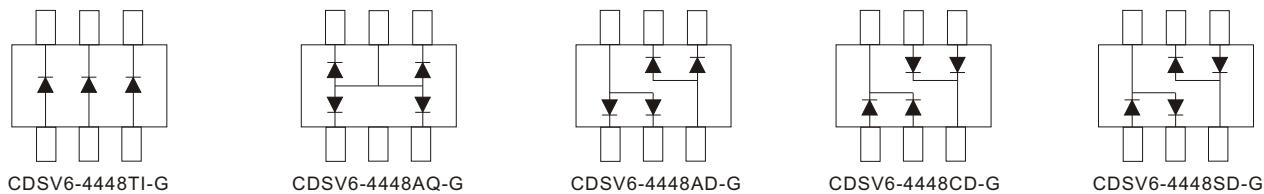
- Design for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

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 $T_a=25^\circ\text{C}$ 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}	$T=1.0 \mu\text{s}$	2	A
Power dissipation	P_D		200	mW
Maximum forward voltage	V_F	@ $I_F=1\text{mA}$ @ $I_F=10\text{mA}$ @ $I_F=100\text{mA}$ @ $I_F=150\text{mA}$	0.72 0.855 1.0 1.25	V
Maximum reverse current	I_R	@ $V_R=20\text{V}$ @ $V_R=75\text{V}$ @ $V_R=25\text{V}, T_J=150^\circ\text{C}$ @ $V_R=75\text{V}, T_J=150^\circ\text{C}$	0.025 0.1 30 50	μA
Maximum reverse recovery time	T_{rr}	$I_F=5\text{mA}, V_R=6\text{V}$	4	nS
Typical diode capacitance	C_T	$V_R=6\text{V}, f=1.0\text{MHz}$	3.5	pF
Maximum junction temperature	T_J		150	$^\circ\text{C}$
Storage temperature	T_{STG}		-55 to +150	$^\circ\text{C}$

REV:A

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

Fig.1 Forward Characteristics

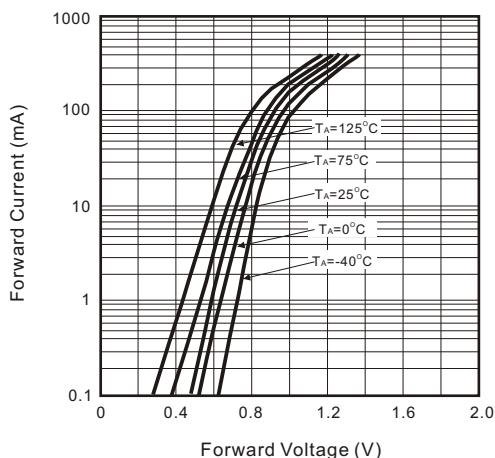


Fig.2 Reverse Characteristics

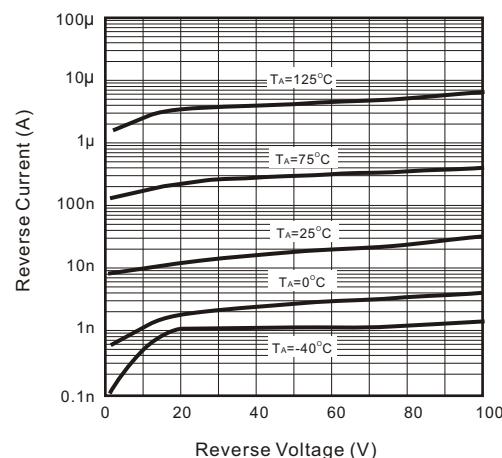


Fig.3 Capacitance Between Terminals Characteristics

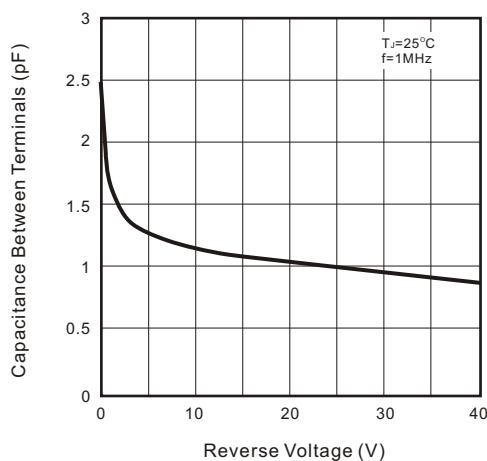


Fig.4 Power Derating Curve

