

# Small Signal Switching Diodes

**COACHIP**  
SMB Diodes Specialist

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

**Voltage: 80Volts**  
**Current: 500mA**  
**RoHS Device**

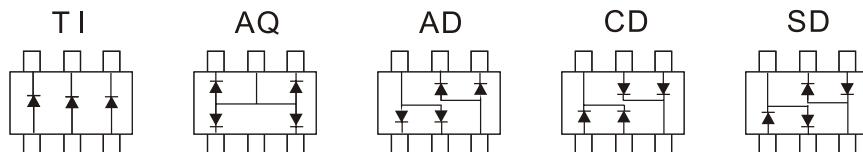
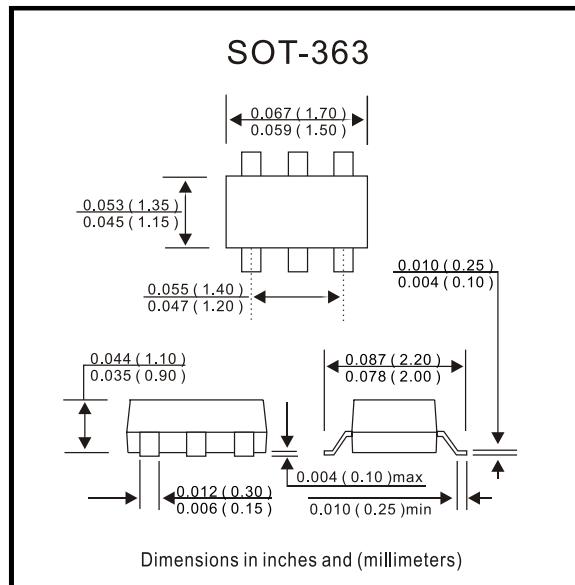


### Features

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

### Mechanical data

- Case:SOT-363, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 208.
- Approx. weight: 0.006 grams approx.



### Maximum Ratings and Electrical Characteristics

( at  $T_a = 25^\circ\text{C}$  unless otherwise noted )

Parameter	Condition	Symbol	Value	Unit
Repetitive peak reverse voltage		$V_{RRM}$	80	V
Reverse voltage		$V_R$	80	V
Forward continue current		$I_{FM}$	500	mA
Surge peak forward current	$T = 1\mu\text{s}$	$I_{FSM}$	2	A
Power dissipation		$P_d$	200	mW
Maximum forward voltage	@ $I_F = 1\text{ mA}$ @ $I_F = 10\text{ mA}$ @ $I_F = 100\text{ mA}$ @ $I_F = 150\text{ mA}$	$V_F$	0.72 0.855 1.0 1.25	V
Maximum reverse current	@ $V_R = 70\text{ V}$ @ $V_R = 75\text{ V}, T_j = 150^\circ\text{C}$ @ $V_R = 25\text{ V}, T_j = 150^\circ\text{C}$ @ $V_R = 20\text{ V}$	$I_R$	0.1 50 30 0.25	uA
Max reverse recovery time	$VR=6\text{ V}, IF=5\text{ mA}$	$T_{rr}$	4	nS
Typical diode capacitnace	$VR=6\text{ V}, f=1\text{ MHz}$	$C_T$	3.5	pF
Max. 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-G/AQ-G/AD-G/CD-G/SD-G )

Fig. 1 - Forward characteristics

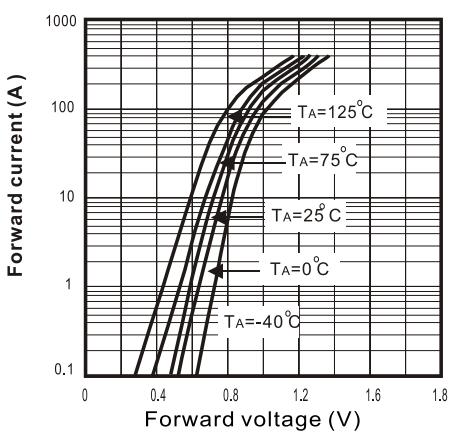


Fig. 2 - Reverse characteristics

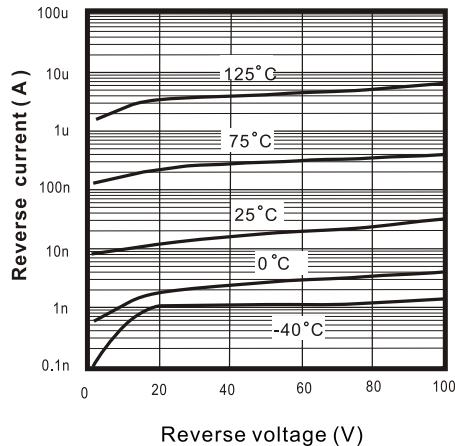


Fig. 3 - Capacitance between terminals characteristics

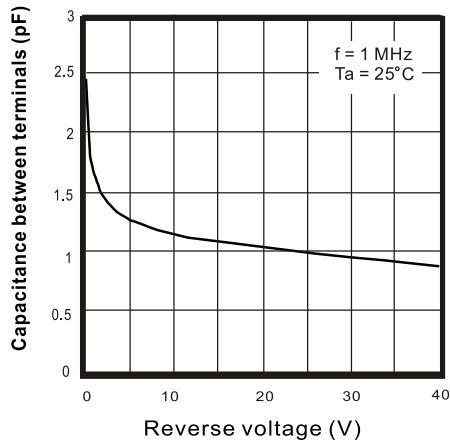


Fig. 4 - Power derating curve

