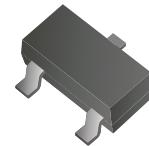


# Small Signal Switching Diodes

## CDSV3-16-G/56-G/70-G/99-G

**Reverse Voltage: 75 Volts**  
**Forward Current: 300 mA**  
**RoHS Device**



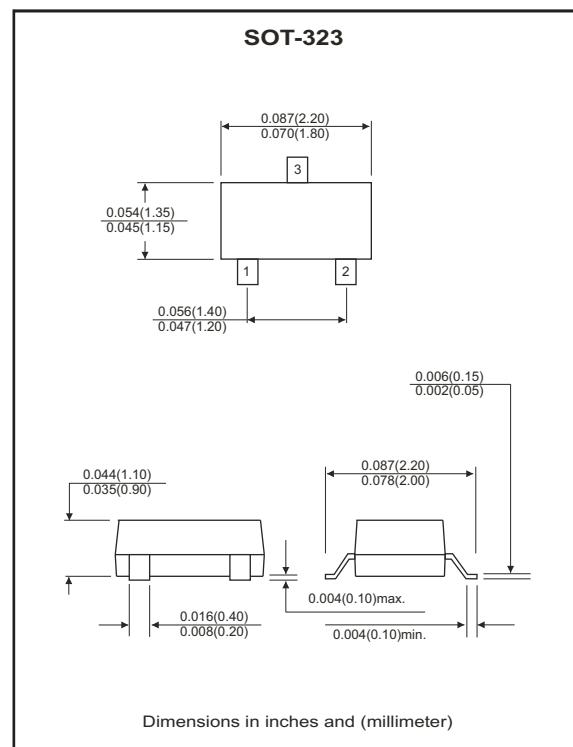
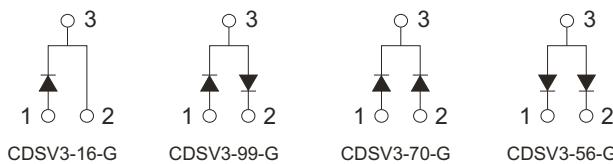
### Features

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

### Mechanical data

- Case: SOT-323, 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	$V_{RRM}$		75	V
Reverse voltage	$V_R$		75	V
Forward current	$I_F$		300	mA
Peak surge forward current	$I_{FSM}$	$T=1.0 \mu\text{s}$	2	A
Power dissipation	$P_D$		200	mW
Maximum forward voltage	$V_F$	@ $I_F=1\text{mA}$ @ $I_F=10\text{mA}$ @ $I_F=50\text{mA}$ @ $I_F=100\text{mA}$	0.715 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 2.5 30 50	$\mu\text{A}$
Maximum reverse recovery time	$T_{rr}$	$I_F=10\text{mA}, V_R=6\text{V}$	4	nS
Typical diode capacitance	$C_J$	$V_R=0\text{V}, f=1.0\text{MHz}$	2	pF
Maximum junction temperature	$T_J$		150	$^\circ\text{C}$
Storage temperature	$T_{STG}$		-55 to +150	$^\circ\text{C}$

REV:B

# Small Signal Switching Diodes

RATING AND CHARACTERISTIC CURVES (CDSV3-16-G/56-G/70-G/99-G)

Fig.1 Forward Characteristics

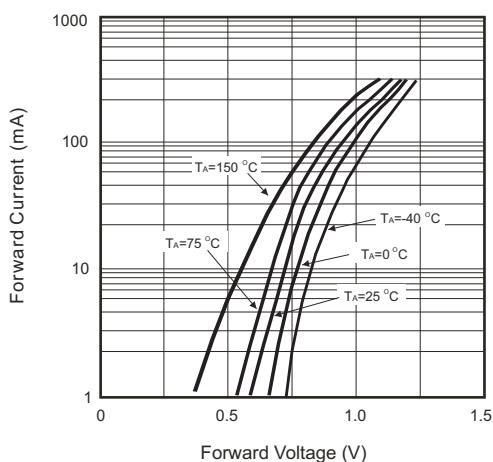


Fig.2 Reverse Characteristics

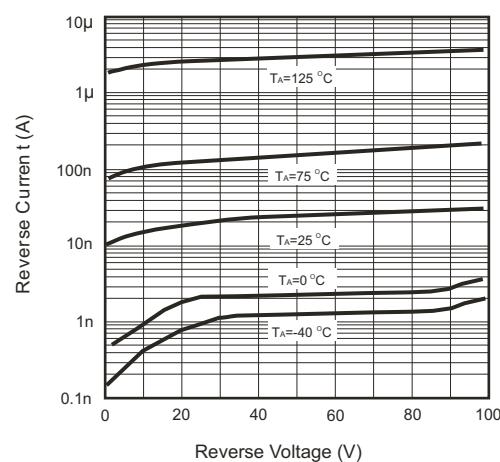


Fig.3 Capacitance Between Terminals Characteristics

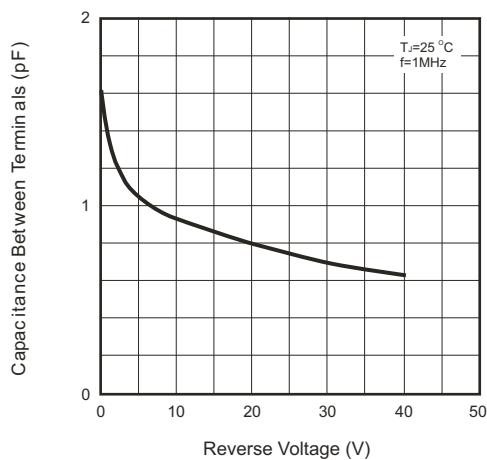


Fig.4 Power Derating Curve

