

## CDSH3-16-G/56-G/70-G/99-G

**Reverse Voltage: 85 Volts**  
**Forward Current: 155 mA**  
**RoHS Device**



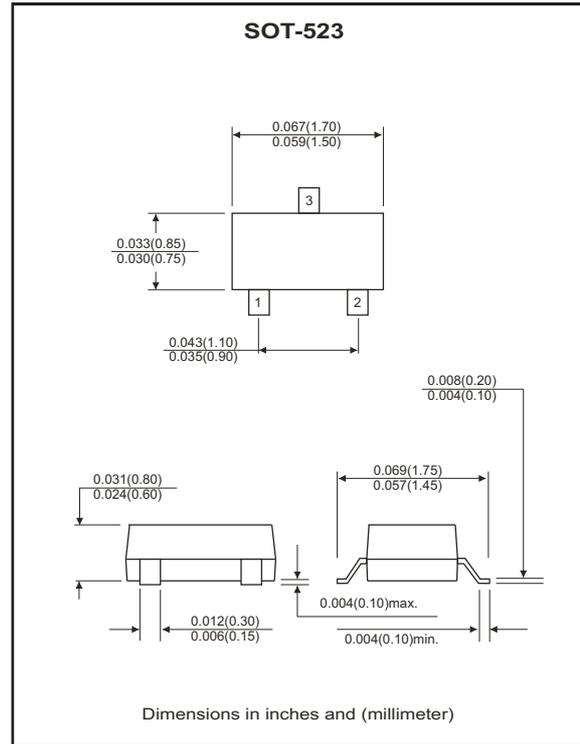
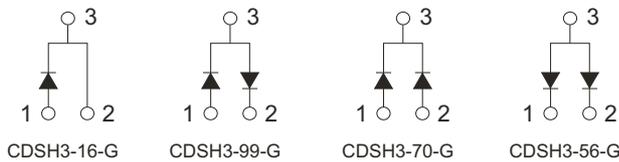
### Features

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

### Mechanical data

- Case: SOT-523, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Approx. weight: 0.002 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 <sub>RRM</sub>		85	V
Reverse voltage	V <sub>R</sub>		85	V
Forward current	I <sub>F</sub>		155	mA
Peak surge forward current	I <sub>FSM</sub>	T=1.0 μS	4	A
Power dissipation	P <sub>D</sub>		150	mW
Maximum forward voltage	V <sub>F</sub>	@I <sub>F</sub> =1mA @I <sub>F</sub> =10mA @I <sub>F</sub> =50mA @I <sub>F</sub> =100mA	0.715 0.855 1.0 1.25	V
Maximum reverse current	I <sub>R</sub>	@V <sub>R</sub> =20V @V <sub>R</sub> =75V @V <sub>R</sub> =25V, T <sub>J</sub> =150 °C @V <sub>R</sub> =75V, T <sub>J</sub> =150 °C	0.03 2.0 60 100	μA
Maximum reverse recovery time	T <sub>rr</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =100Ω	4	nS
Typical diode capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1.0MHz	1.5	pF
Maximum junction temperature	T <sub>J</sub>		150	°C
Storage temperature	T <sub>STG</sub>		-55 to +150	°C

## RATING AND CHARACTERISTIC CURVES (CDSH3-16-G/56-G/70-G/99-G)

Fig.1 - Forward Characteristics

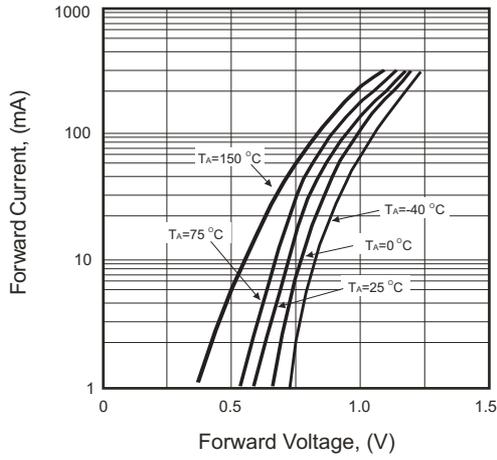


Fig.2 - Reverse Characteristics

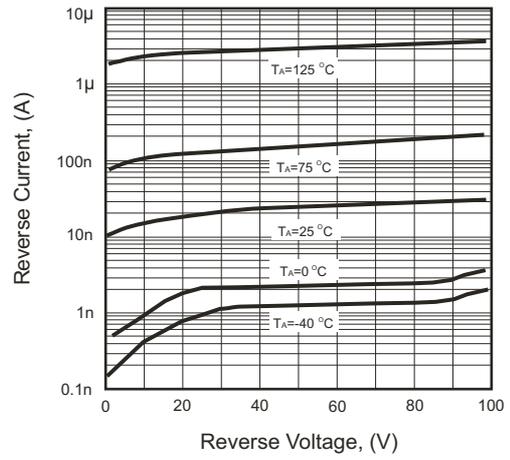


Fig.3 - Capacitance Between Terminals Characteristics

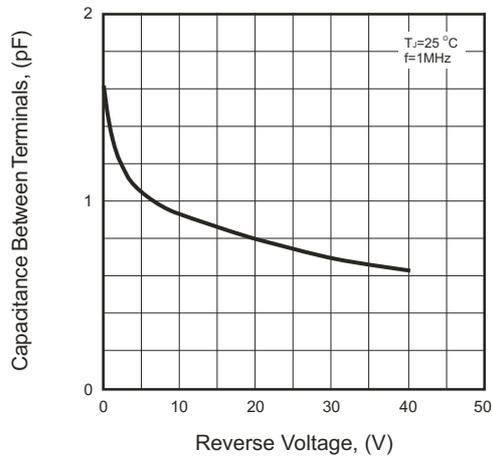


Fig.4 - Power Derating Curve

