

## CDSH3-4448/A/C/S-G

Voltage: 80 Volts

Current: 250 mA

RoHS Device

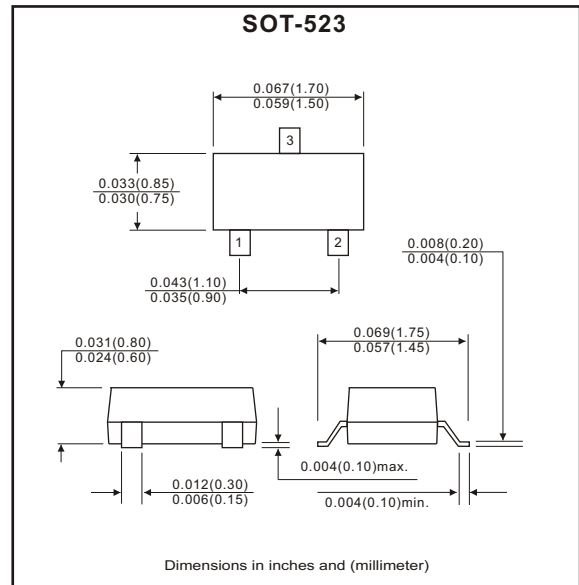
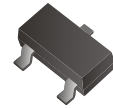
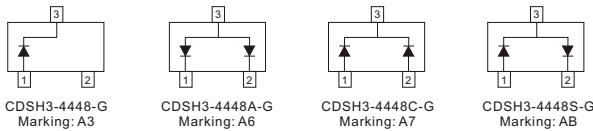
### Features

- Fast switching speed.
- For general purpose switching applications.
- High conductance.

### Mechanical data

- Case: SOT-523, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-202E, method 208C.
- Weight: 0.002 grams approx.

### Circuit Diagram



### Maximum Ratings and Electrical Characteristics

(Single diode, at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-repetitive peak reverse voltage	$V_{RM}$	100	V
Peak repetitive peak reverse voltage	$V_{RRM}$		
Working peak reverse voltage	$V_{RWM}$	80	V
DC blocking voltage	$V_R$		
RMS reverse voltage	$V_{R(RMS)}$	57	V
Forward continuous current	$I_{FM}$	500	mA
Averaged rectified output current	$I_O$	250	mA
Peak forward surge current	$I_{FSM}$	4.0 2.0	A
		@TP=1.0μS @TP=1.0S	
Power dissipation	$P_D$	150	mW
Thermal resistance, junction to ambient	$R_{\theta JA}$	833	°C/W
Storage temperature	$T_{STG}$	-65 to +150	°C

### Electrical Ratings @TA=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$V_{BR}$	$I_R=2.5\mu A$	80			V
Forward voltage	$V_{F1}$	$I_F=5mA$	0.62		0.72	V
	$V_{F2}$	$I_F=10mA$			0.855	V
	$V_{F3}$	$I_F=100mA$			1.0	V
	$V_{F4}$	$I_F=150mA$			1.25	V
Reverse current	$I_{R1}$	$V_R=70V$			0.1	μA
	$I_{R2}$	$V_R=20V$			25	nA
Capacitance between terminals	$C_T$	$V_R=6V, f=1MHz$			3.5	pF
Reverse recovery time	$T_{rr}$	$V_R=6V, I_F=5mA$			4	nS

## Rating and Characteristic Curves (CDSH3-4448/A/C/S-G)

Fig.1 Forward Characteristics

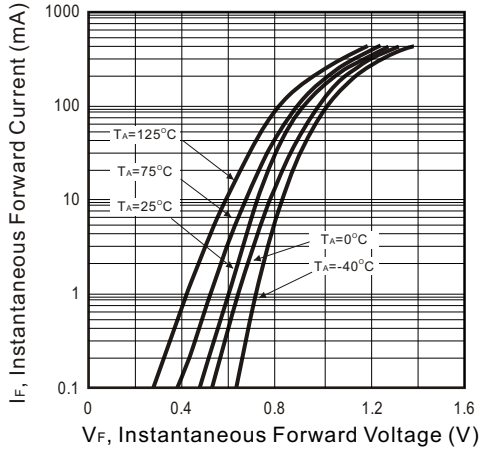


Fig.2 Reverse Characteristics

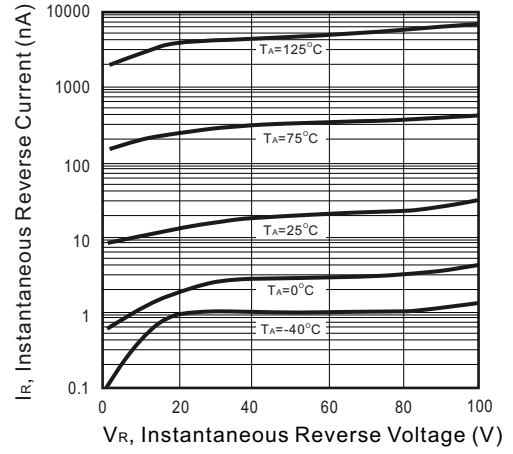


Fig.3 Capacitance Between Terminals Characteristics

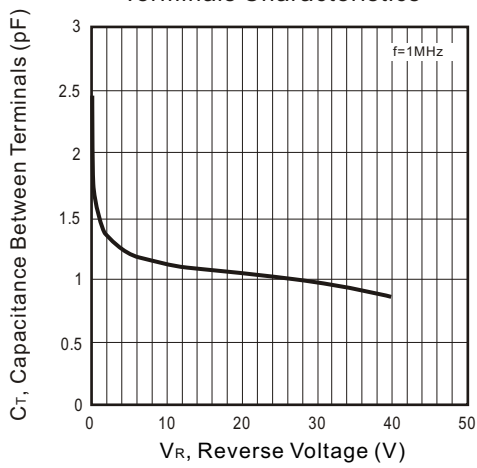


Fig.4 Power Derating Curve

