

CDSH3-4448/A/C/S-G

Voltage: 80 Volts

Current: 250 mA

RoHS Device

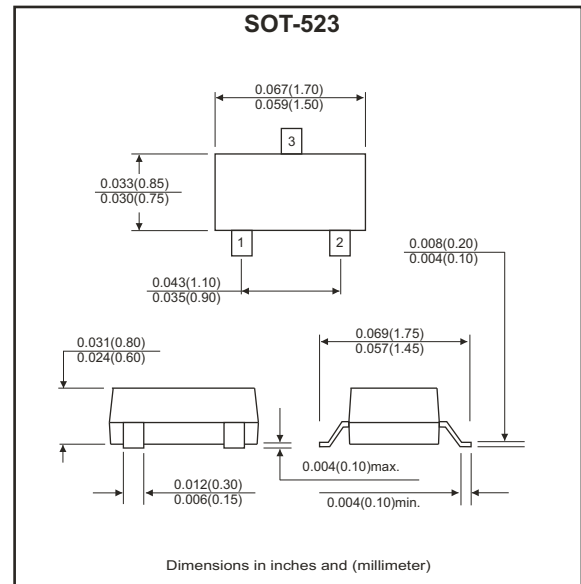
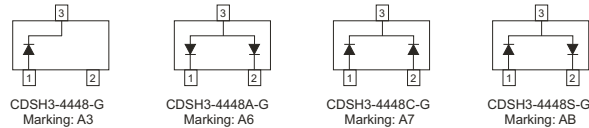
Features

- 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 (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}	80	V
Working peak reverse voltage	V_{RWM}		
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 @TP=1.0μS @TP=1.0S	I_{FSM}	4.0 2.0	A
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 Characteristics (Single diode, at TA=25°C unless otherwise noted)

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

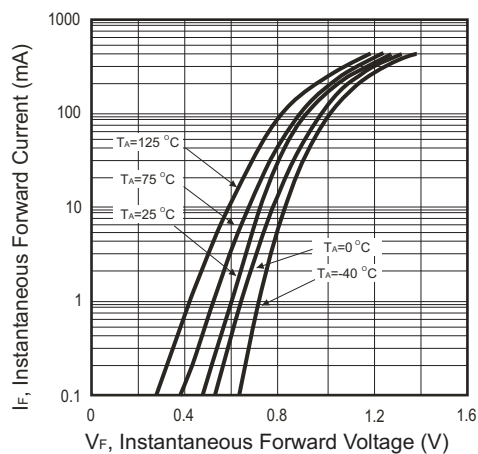


Fig.2 - Reverse Characteristics

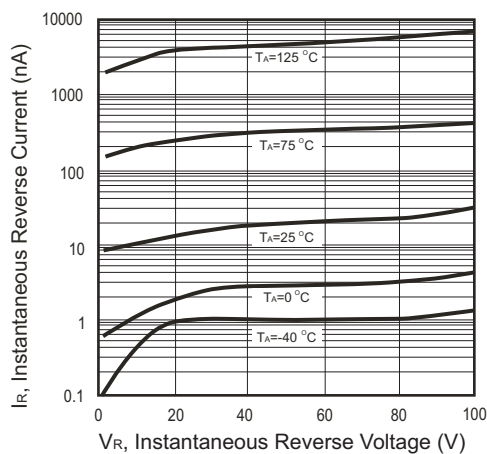


Fig.3 - Capacitance Between Terminals Characteristics

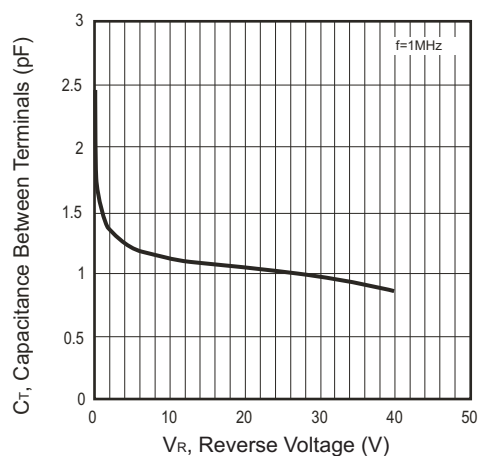


Fig.4 - Power Derating Curve

