SMD Switching Diode

CDSP400

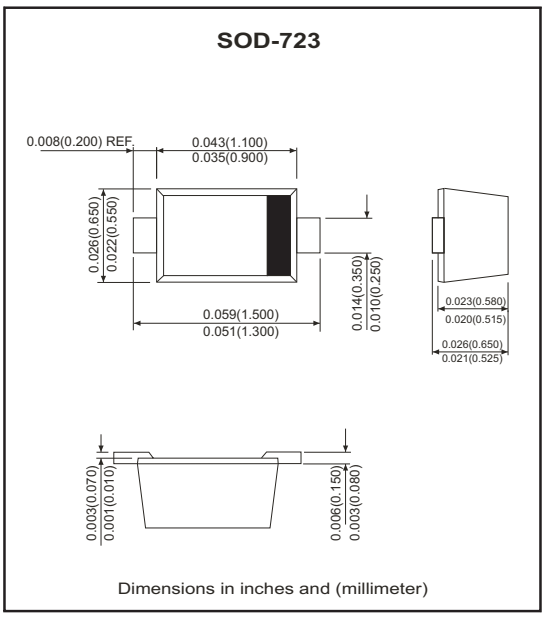
RoHS Device

Features

-Small surface mounting type.

-High speed.

-High reliability with high surge current handling capability.



Mechanical Data

-Case: Molded plastic SOD-723

-Terminals: Solderable per MIL-STD-750, Method 2026.1.

-Polarity: Indicated by cathode band.

-Mounting position: Any.

-Marking: 7

Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	90	V
DC reverse voltage	V_R	80	V
Peak forward current	I_{FM}	225	mA
Mean rectifying current	I_O	100	mA
Surge current Tp=1S	I_{surge}	500	mA
Junction Temperature	T_J	125	°C
Junction Temperature	T_{STG}	-55 to +125	°C

Electrical Ratings (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min.	Max.	Unit
Forward voltage	I_F=100mA	V_F		1.2	V
Reverse current	V_R=80V	I_R		0.1	μA
Capacitance between terminals	V_R=0.5V, f=1MHz	C_T		3.0	pF
Reverse recovery time	V_R=6V, I_F=10mA, R_L=100Ω	t_{rr}		4.0	nS

ELECTRICAL CHARACTERISTIC CURVES (CDSP400)

Fig.1 - Forward Characteristics

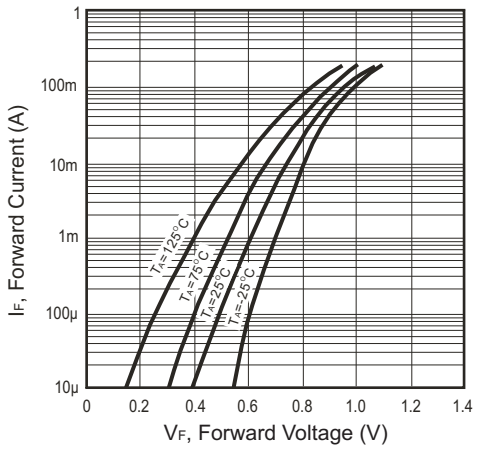


Fig.2 - Reverse Characteristics

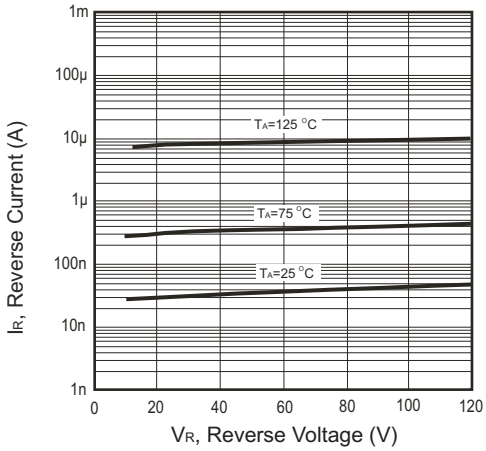


Fig.3 - Capacitance between terminals

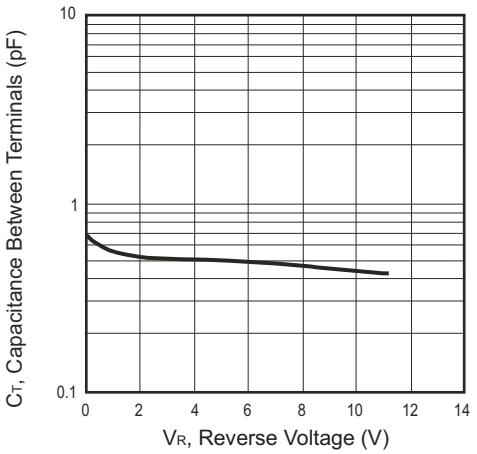


Fig.4 - Reverse Recovery Time Characteristics

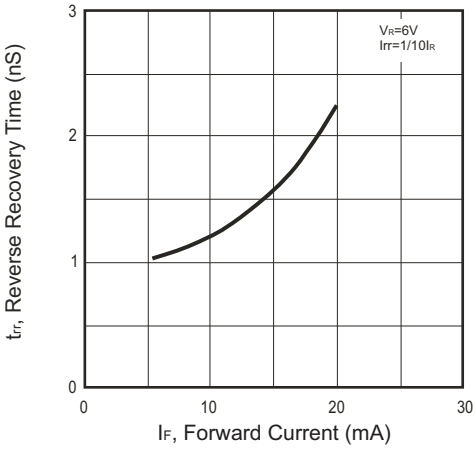


Fig.5 - Surge Current Characteristics

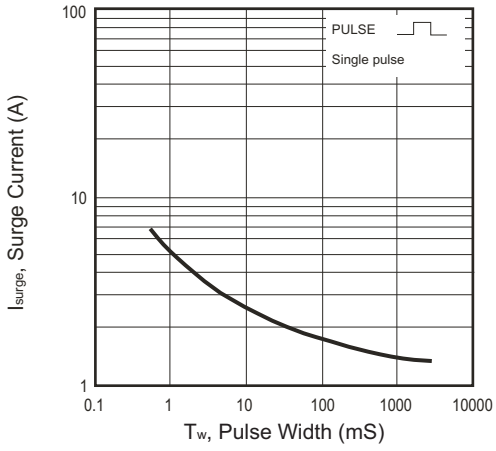


Fig.6 - Reverse Recovery Time (trr) Measurement Circuit