

SMD Switching Diode



CDSP400-G (RoHS Device)

Reverse Voltage: 80 Volts

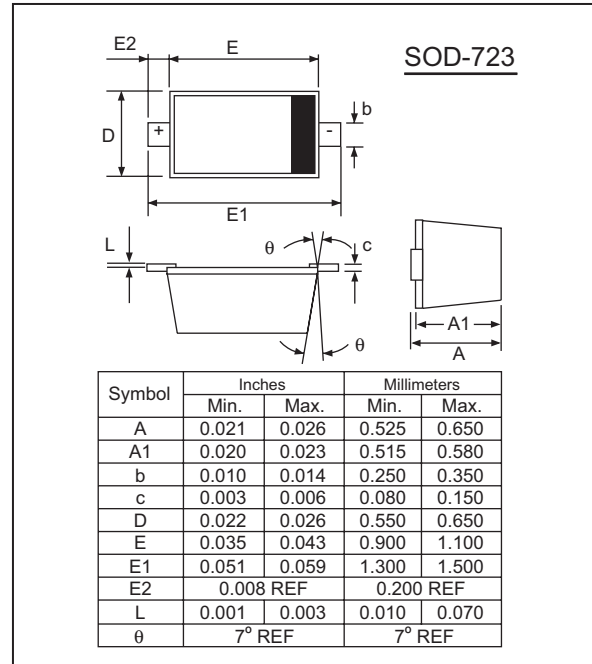
Forward Current: 100 mA

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 $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	80	V
Mean rectifying current	I_o	100	mA
Peak forward current	I_{FM}	225	A
Junction temperature	T_J	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~+125	$^\circ\text{C}$
Peak reverse voltage	V_{RM}	90	V
Surge current $T_p=1\text{S}$	I_{surge}	500	mA

Electrical Ratings (at $T_A=25^\circ\text{C}$ unless otherwise specified)

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



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Rating and Characteristic Curves

Fig. 1 Forward characteristics

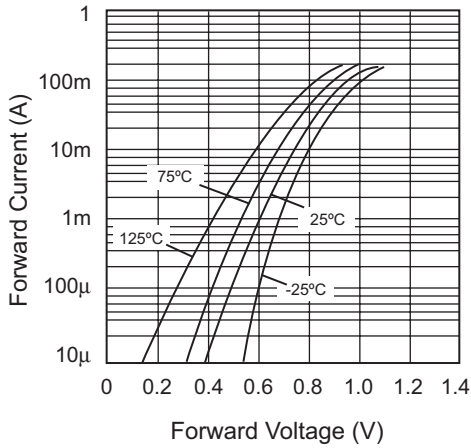


Fig. 2 Capacitance between terminals

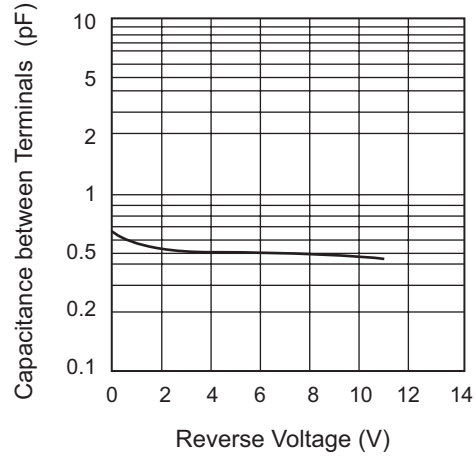


Fig. 3 Reverse characteristics

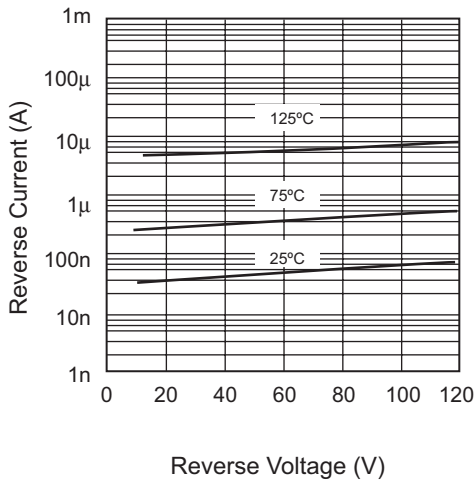


Fig. 4 Surge current characteristics

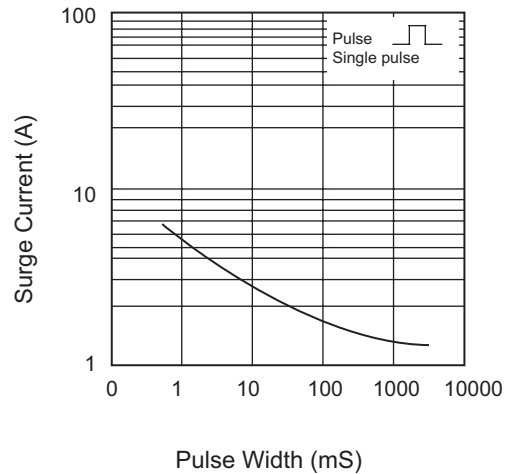


Fig. 5 Reverse recovery time characteristics

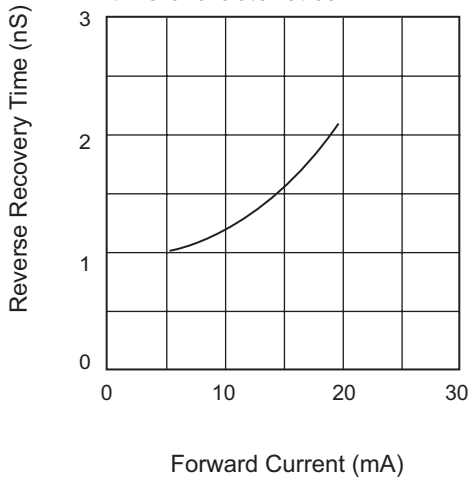


Fig. 6 Reverse recovery time (t_{rr}) measurement circuit

