

## **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Comchip Technology](#)

[CDSP400-G](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# SMD Switching Diode

## CDSP400-G (RoHS Device)

**Reverse Voltage: 80 Volts**

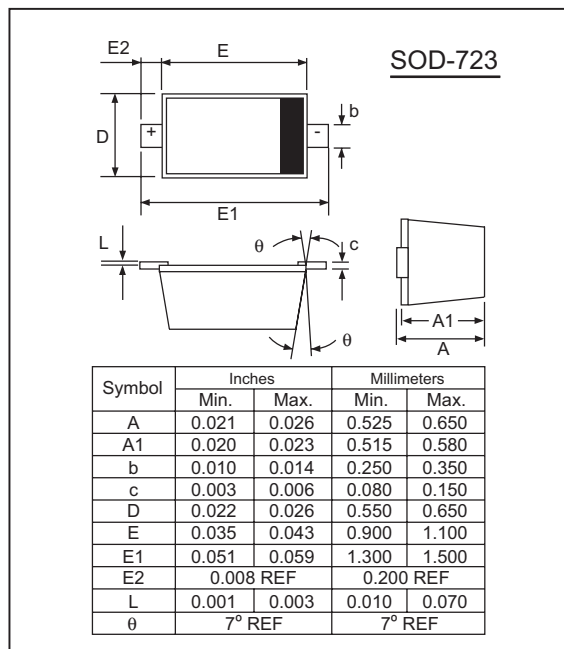
**Forward Current: 100 mA**

### 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<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Limits	Unit
DC reverse voltage	V <sub>R</sub>	80	V
Mean rectifying current	I <sub>o</sub>	100	mA
Peak forward current	I <sub>FM</sub>	225	A
Junction temperature	T <sub>J</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55~+125	°C
Peak reverse voltage	V <sub>RM</sub>	90	V
Surge current T <sub>p</sub> =1S	I <sub>surge</sub>	500	mA

### Electrical Ratings (at T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>			1.2	V	I <sub>F</sub> =100mA
Reverse current	I <sub>R</sub>			0.1	μA	V <sub>R</sub> =80V
Capacitance between terminals	C <sub>T</sub>			3.0	pF	V <sub>R</sub> =0.5V, f=1MHz
Reverse recovery time	T <sub>rr</sub>			4.0	nS	V <sub>R</sub> =6V, I <sub>F</sub> =10mA, R <sub>L</sub> =100Ω

# SMD Switching Diode

## CDSP400-G (RoHS Device)

### Rating and Characteristic Curves

Fig. 1 Forward characteristics

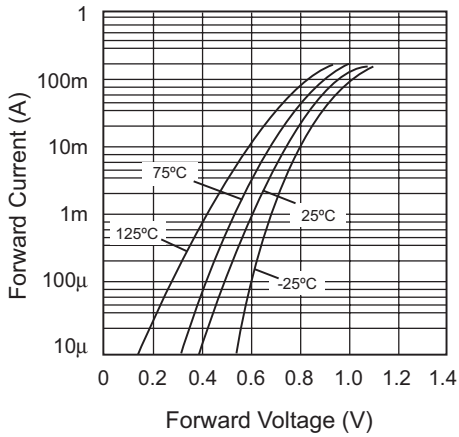


Fig. 2 Capacitance between terminals

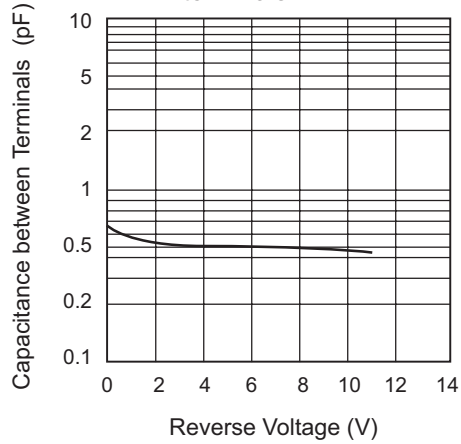


Fig. 3 Reverse characteristics

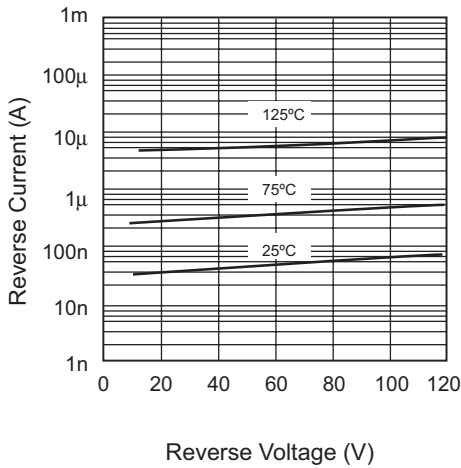


Fig. 4 Surge current characteristics

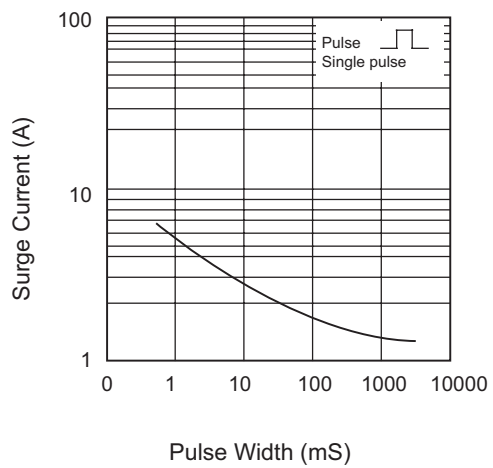


Fig. 5 Reverse recovery time characteristics

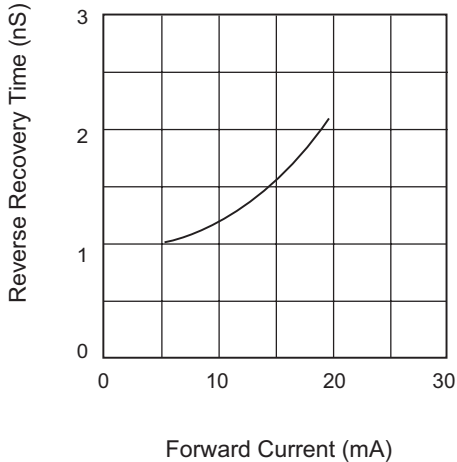
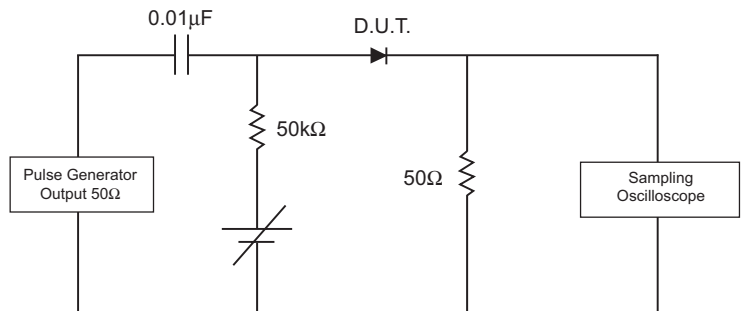


Fig. 6 Reverse recovery time ( $t_{rr}$ ) measurement circuit



"-G" suffix designated RoHS compliant version