

# SMD Switching Diode

**Comchip**  
SMD Diode Specialist

## CDSF4448

**I<sub>o</sub> = 125 mA**

**V<sub>R</sub> = 80 Volts**

**RoHS Device**

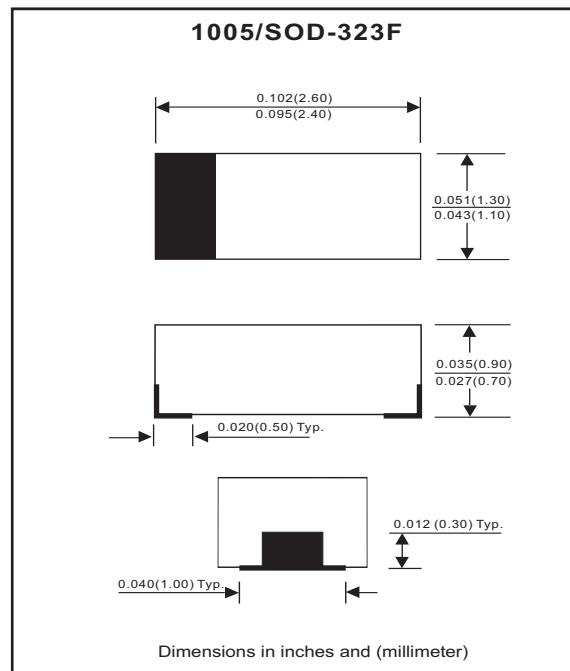


### Features

- Fast Switching Speed
- Designed for mounting on small surface.
- Extremely thin/leadless package.

### Mechanical data

- Case: 1005/SOD-323F Standard package , molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.006 gram (approx.).



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V <sub>RRM</sub>			100	V
Reverse voltage		V <sub>R</sub>			80	V
Average forward rectified current		I <sub>o</sub>			125	mA
Forward current,surge peak	t = 1 us t = 8.3ms	I <sub>FSM</sub>			2 1	A A
Storage temperature		T <sub>STG</sub>	-40		+125	°C
Junction temperature		T <sub>j</sub>	-40		+125	°C

### Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 5 mA I <sub>F</sub> = 100 mA	V <sub>F</sub>	0.62		0.72 1	V V
Reverse current	V <sub>R</sub> = 30 V V <sub>R</sub> = 80 V	I <sub>R</sub>			25 100	nA nA
Capacitance between terminals	f = 1 MHz, and 0.5 VDC reverse voltage	C <sub>T</sub>			9	pF
Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> = 10mA,I <sub>rr</sub> =0.1 X I <sub>R</sub> ,R <sub>L</sub> =100ohm	T <sub>rr</sub>			9	NS

REV:A

## RATING AND CHARACTERISTIC CURVES (CDSF4448)

Fig. 1 - Forward characteristics

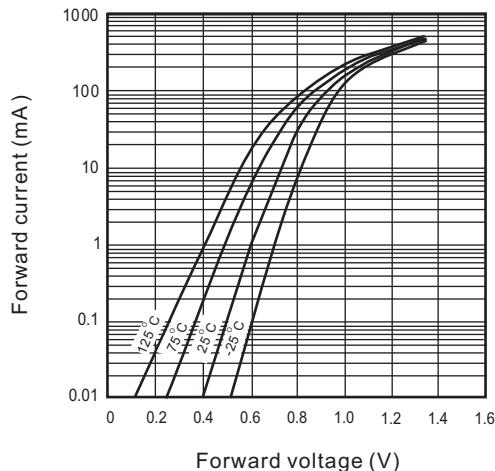


Fig. 2 - Reverse characteristics

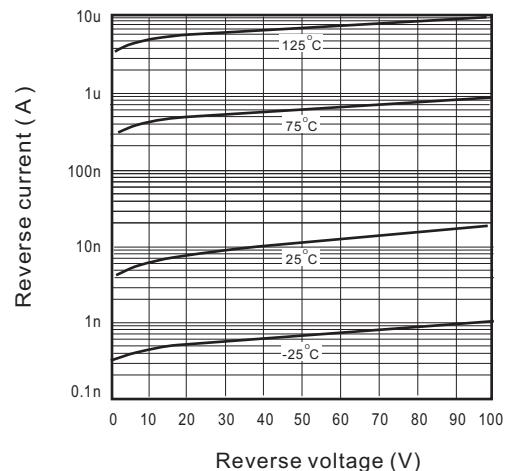


Fig. 3 - Capacitance between terminals characteristics

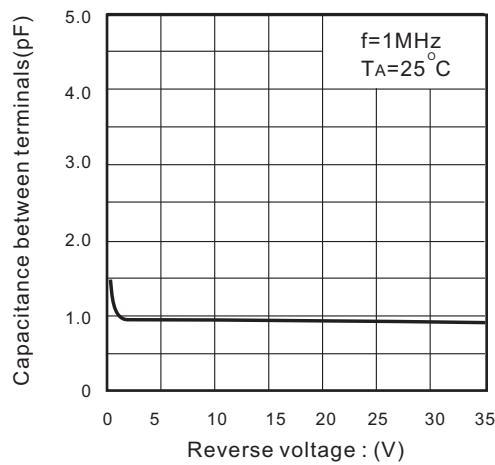


Fig. 4 - Current derating curve

