

# SMD Switching Diode

## CDSFR101A (RoHs Device)

High Speed

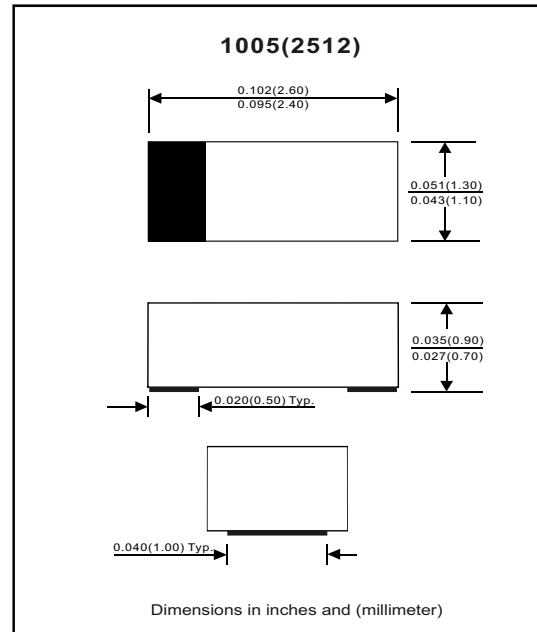


### Features

- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low leakage current (<50nA).
- High mounting capability, strong surge withstand, high reliability.

### Mechanical data

- Case: 1005(2512) 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>			90	V
Reverse voltage		V <sub>R</sub>			80	V
Average forward current		I <sub>O</sub>			100	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load ( JEDEC method)	I <sub>FSM</sub>		1000		mA
Repetitive peak forward current		I <sub>FRM</sub>			225	mA
Power Dissipation		P <sub>D</sub>			300	mW
Storage temperature		T <sub>STG</sub>	-40		+125	°C
Junction temperature		T <sub>J</sub>			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 100 mA DC	V <sub>F</sub>			1.0	V
Reverse current	V <sub>R</sub> = 75 V	I <sub>R</sub>			50	nA
Capacitance between terminals	f = 1 MHz, and 0.5VDC reverse voltage	C <sub>T</sub>		3		pF
Reverse recovery time	V <sub>R</sub> = 6V ,I <sub>F</sub> =10 mA, R <sub>L</sub> =50 ohms	T <sub>rr</sub>		4		nS

## RATING AND CHARACTERISTIC CURVES (CDSFR101A)

Fig. 1 - Forward characteristics

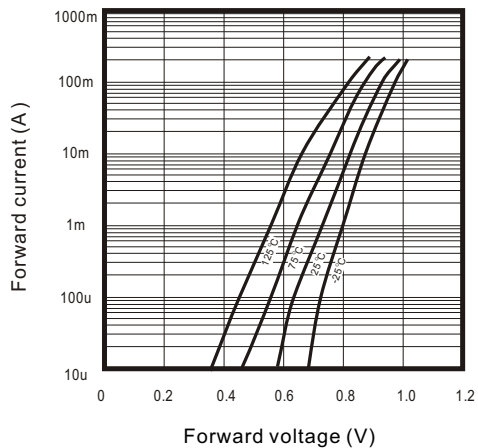


Fig. 2 - Reverse characteristics

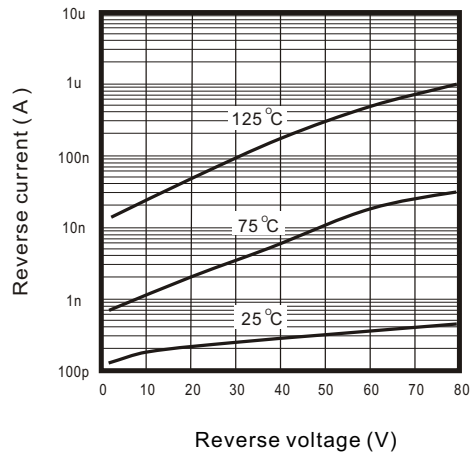


Fig. 3 - Capacitance between terminals characteristics

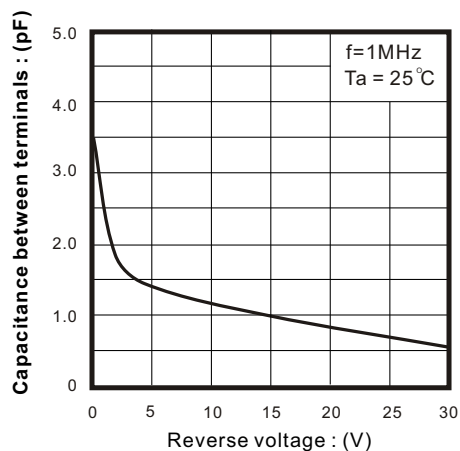


Fig. 4 - Current derating curve

