

# SMD Switching Diode

## CDSF101A (Lead-free Device)

High Speed

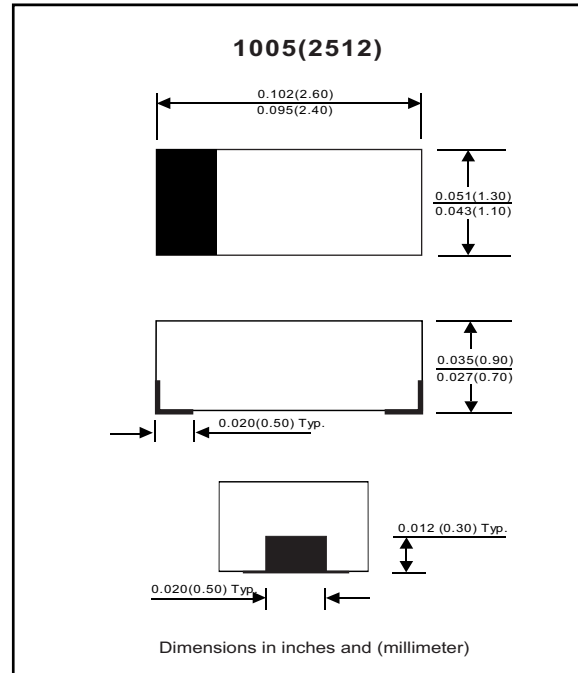


### Features

- 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 (approximately)



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		VRRM			90	V
Reverse voltage		VR			80	V
Average forward current		Io			100	mA
Forward current , surge peak	8.3 ms single half sine-wave superimposed on rate load ( JEDEC method )	IFSM		1000		mA
Repetitive peak forward current		IFRM			225	mA
Power Dissipation		PD			300	mW
Storage temperature		TSTG	-40		+125	°C
Junction temperature		Tj	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 100 mADC	VF			1.0	V
Reverse current	VR = 75 V	IR			50	nA
Capacitance between terminals	f = 1MHz, and 0.5VDC reverse voltage	CT		3		pF
Reverse recovery time	VR = 6V, IF = 10 mA, RL =50 ohms	Trr		4		nS

## RATING AND CHARACTERISTIC CURVES (CDSF101A)

Fig. 1 - Forward characteristics

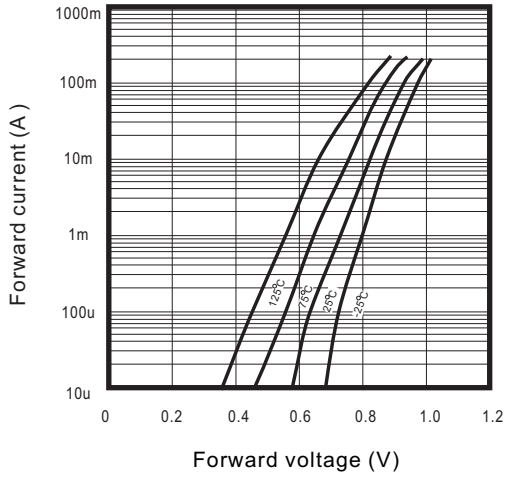


Fig. 2 - Reverse characteristics

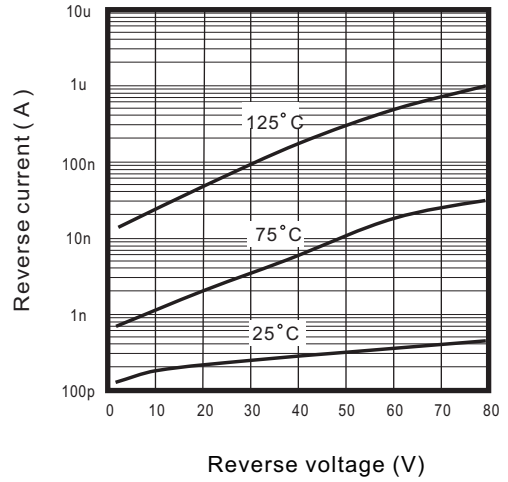


Fig. 3 - Capacitance between terminals characteristics

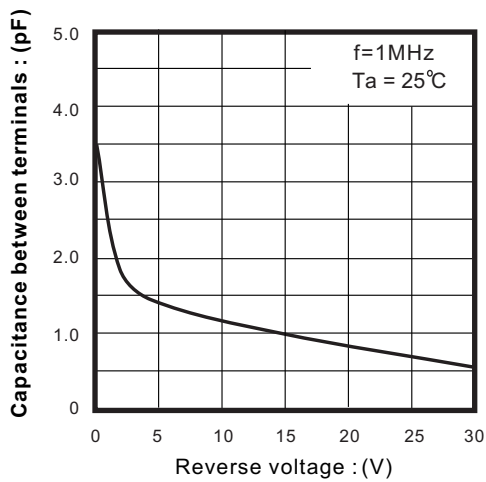


Fig. 4 - Current derating curve

