

SMD Switching Diode

CDSF101A (Lead-free Device)

High Speed

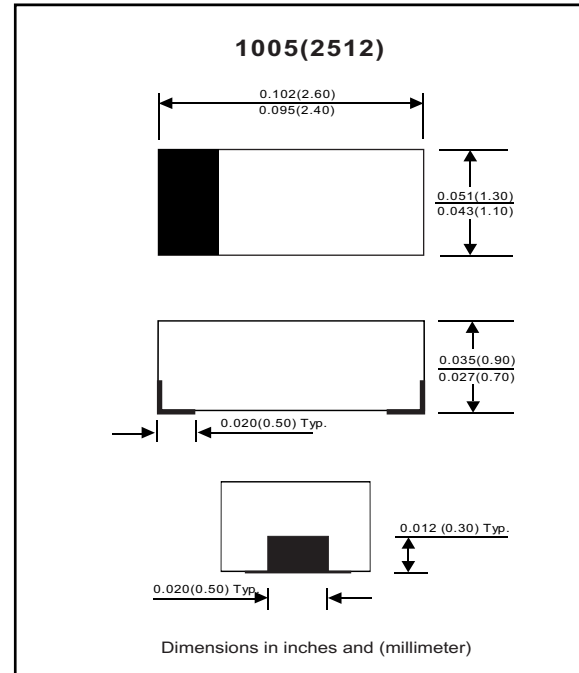


Features

- 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		V _{RRM}			90	V
Reverse voltage		V _R			80	V
Average forward current		I _o			100	mA
Forward current , surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}		1000		mA
Repetitive peak forward current		I _{FRM}			225	mA
Power Dissipation		P _D			300	mW
Storage temperature		T _{STG}	-40		+125	°C
Junction temperature		T _j	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 100 mADC	V _F			1.0	V
Reverse current	V _R = 75 V	I _R			50	nA
Capacitance between terminals	f = 1MHz, and 0.5VDC reverse voltage	C _T		3		pF
Reverse recovery time	V _R = 6V, I _F = 10 mA, R _L =50 ohms	T _{rr}		4		nS

RATING AND CHARACTERISTIC CURVES (CDSF101A)

Fig. 1 - Forward characteristics

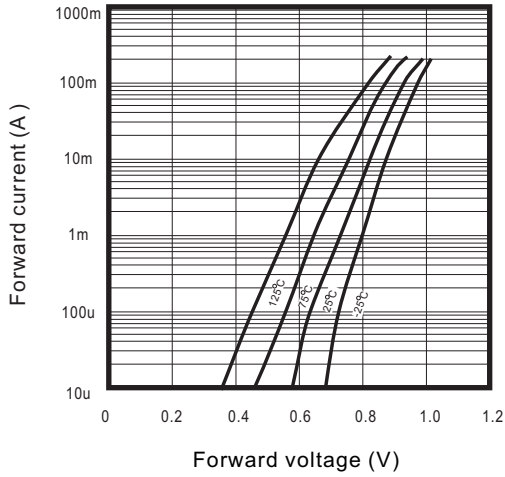


Fig. 2 - Reverse characteristics

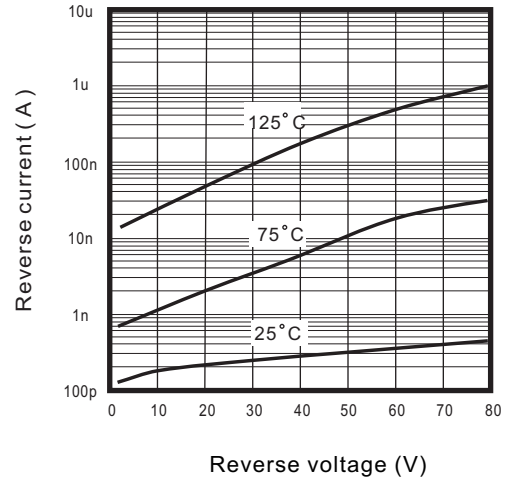


Fig. 3 - Capacitance between terminals characteristics

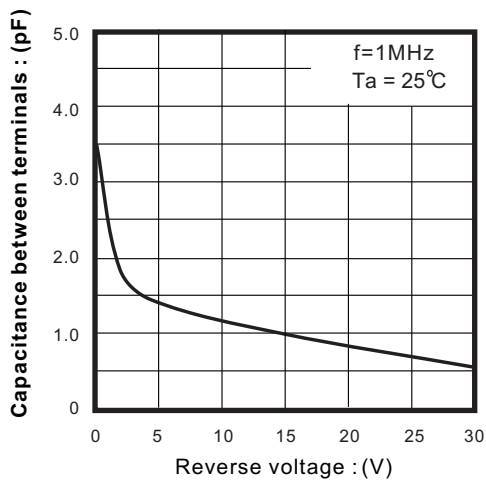


Fig. 4 - Current derating curve

