

SMD Switching Diode

CDSF4148-B03 (Lead-free Device)

High Speed



Features

Designed for mounting on small surface.

Extremely thin/leadless package.

High mounting capability, strong surge withstand, high reliability.

Mechanical data

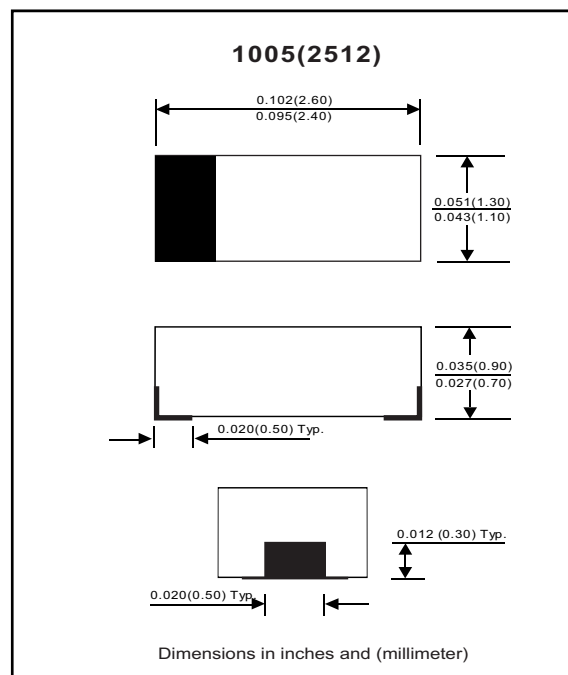
Case: 1005 (2512) standard package, molded plastic.

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}			100	V
Reverse voltage		V _R			75	V
Average forward current		I _O			150	mA
Forward current , surge peak	t _p =1μS t _p =1mS	I _{FSM}		4 1		A
Repetitive peak forward current		I _{FRM}			300	mA
Power Dissipation		P _D			350	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 = 50 mADC	V _F			1.0	V
Reverse current	V _R = 20 V V _R = 75 V	I _R			25 2.5	nA uA
Capacitance between terminals	f = 1MHz, and 0 VDC reverse voltage	C _T			4	pF
Reverse recovery time	I _F = I _R = 10 mA, R _L =100 ohms, i _{rr} = 1mA	T _{rr}			4	nS

RATING AND CHARACTERISTIC CURVES (CDSF4148-B03)

Fig. 1 - Forward characteristics

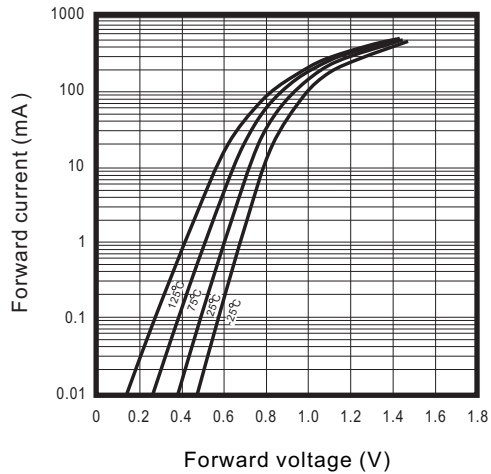


Fig. 2 - Reverse characteristics

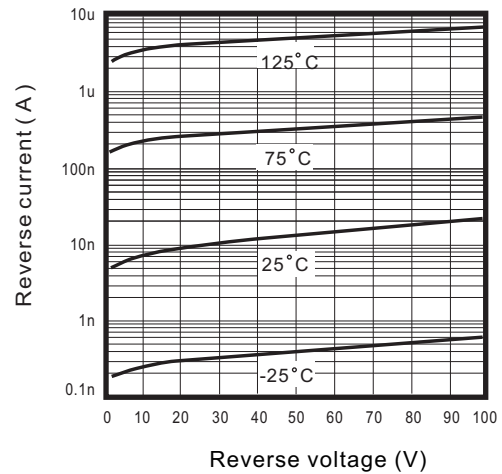


Fig. 3 - Capacitance between terminals characteristics

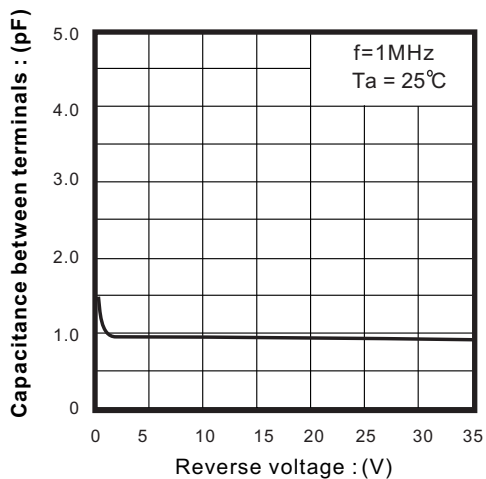


Fig. 4 - Current derating curve

