SMD Switching Diode

COMCHIP
SMD Diodes Specialist

CDSU400B (Lead-free Device)

High Speed

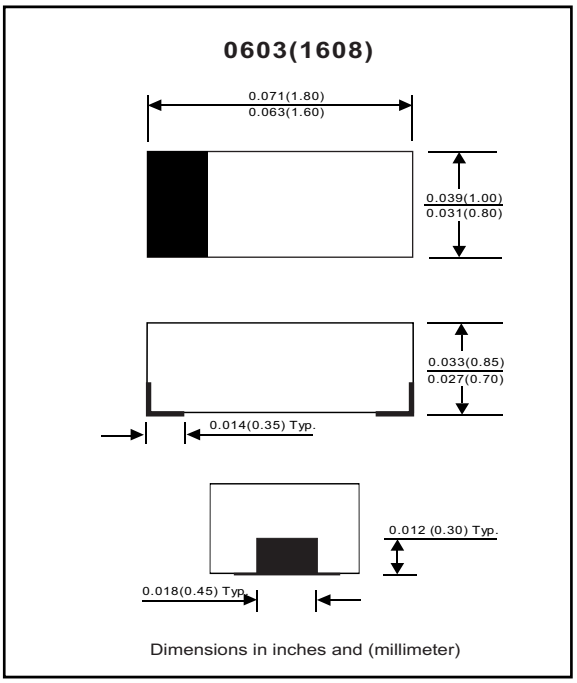
Features

Designed for mounting on small surface.

Extremely thin/leadless package.

Low leakage current.

High mounting capability, strong surge withstand, high reliability.



Mechanical data

Case: 0603 (1608) standard package, molded plastic.

Terminals: Gold plated, solderable per MIL-STD-750, method 2026.

Polarity: Indicated by cathode band.

Mounting position: Any.

Weight: 0.003 gram (approximately)

Maximum Rating (at T_A = 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			150	mW
Storage temperature		T_{STG}	-55		+125	°C
Junction temperature		T_j	-55		+125	°C

Electrical Characteristics (at T_A = 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 = 80 V	I_R			0.1	uA
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	Trr			4	nS

RATING AND CHARACTERISTIC CURVES (CDSU400B)

Fig. 1 - Forward characteristics

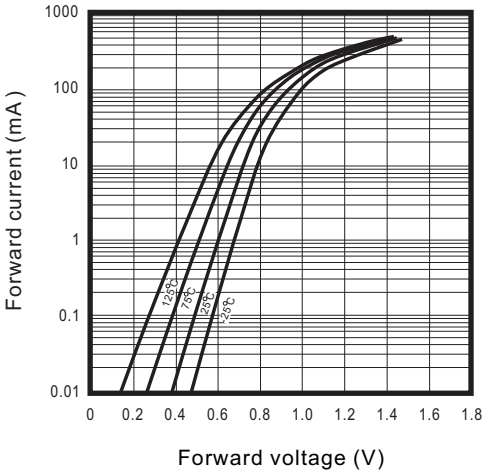


Fig. 2 - Reverse characteristics

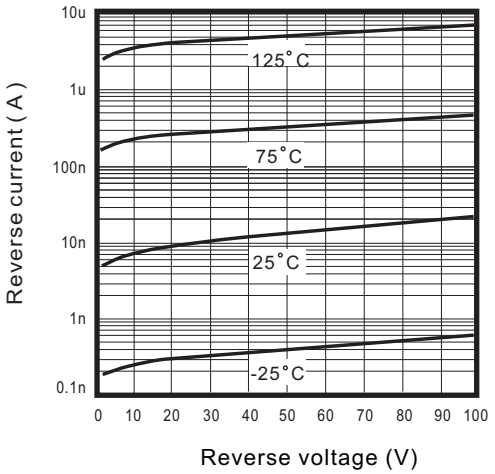


Fig. 3 - Capacitance between terminals characteristics

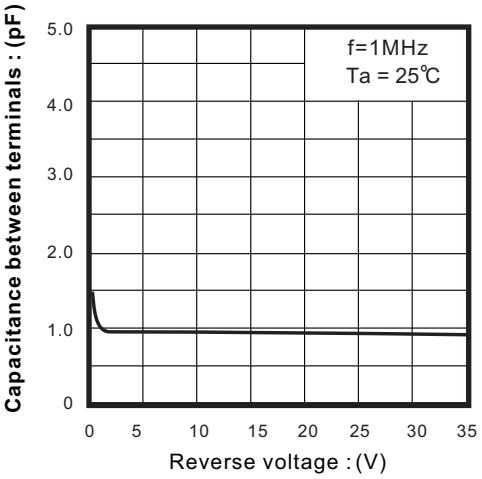
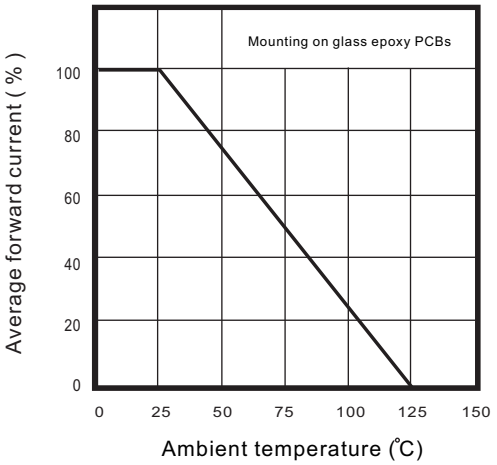



Fig. 4 - Current derating curve