

## CDSU101A (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

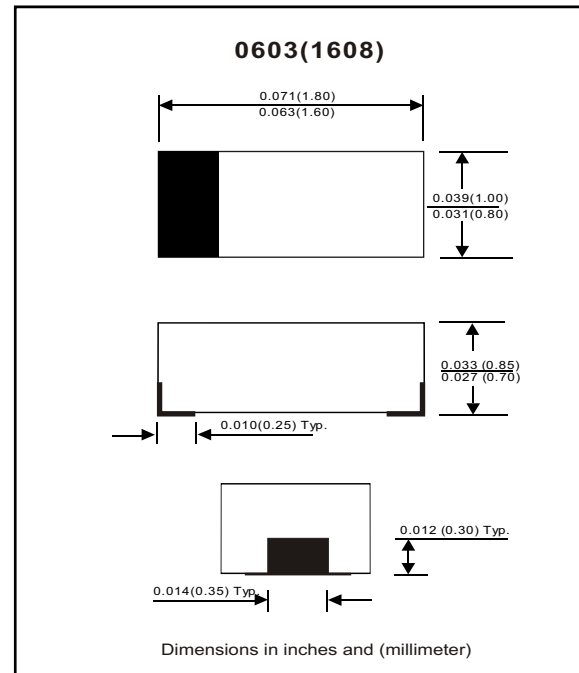
Case: 0603 (1608) standard package, molded plastic.

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 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
Power Dissipation		P <sub>D</sub>			150	mW
Storage temperature		T <sub>STG</sub>	-40		+125	°C
Junction temperature		T <sub>j</sub>	-40		+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 = 1MHz, 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 (CDSU101A)

Fig. 1 - Forward characteristics

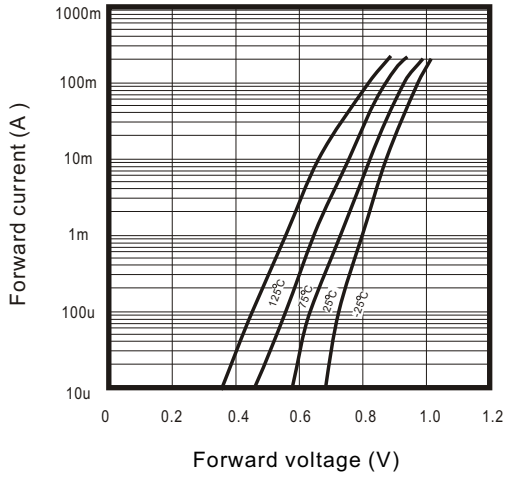


Fig. 2 - Reverse characteristics

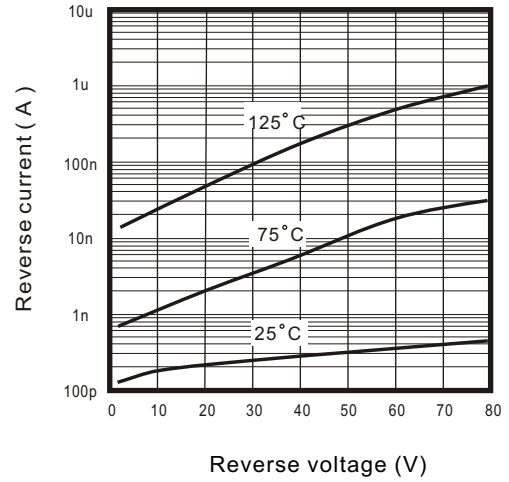


Fig. 3 - Capacitance between terminals characteristics

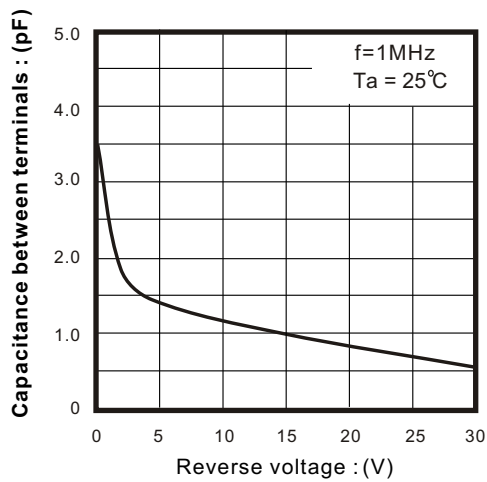


Fig. 4 - Current derating curve

