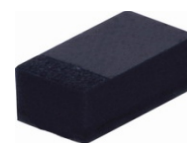


CDSUR101A(RoHs Device)

High Speed

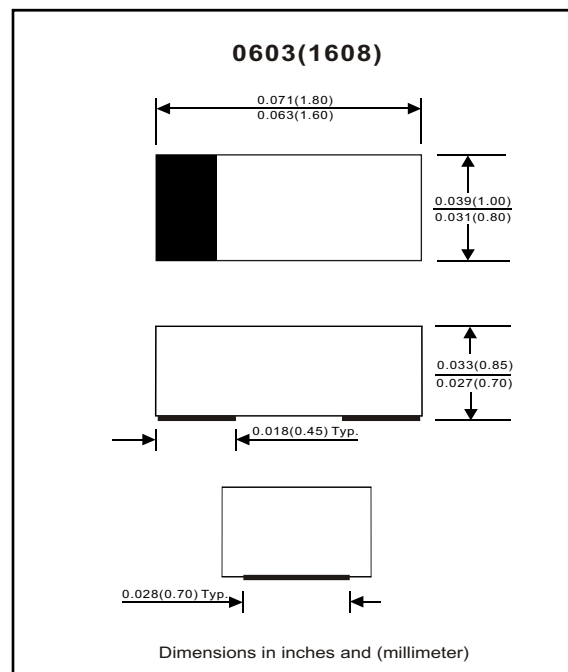


Features

- 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(approx.).



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			150	mW
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100 \text{ mA DC}$	V_F			1.0	V
Reverse current	$V_R = 75 \text{ V}$	I_R			50	nA
Capacitance between terminals	$f = 1 \text{ MHz}$,and 0.5VDC reverse voltage	C_T		3		pF
Reverse recovery time	$V_R = 6 \text{ V}$, $I_F = 10 \text{ mA}$, $R_L = 50 \text{ ohms}$	T_{rr}		4		nS

RATING AND CHARACTERISTIC CURVES (CDSUR101A)

Fig. 1 - Forward characteristics

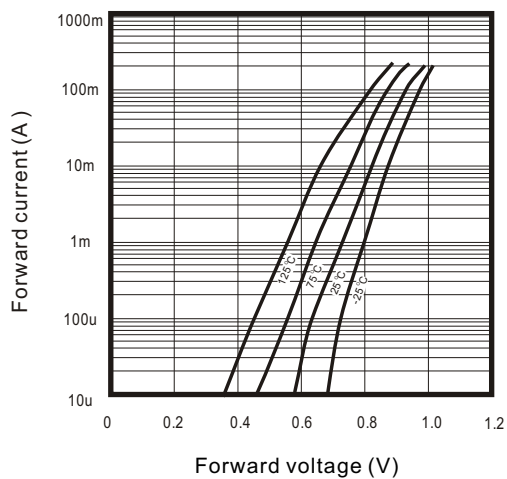


Fig. 2 - Reverse characteristics

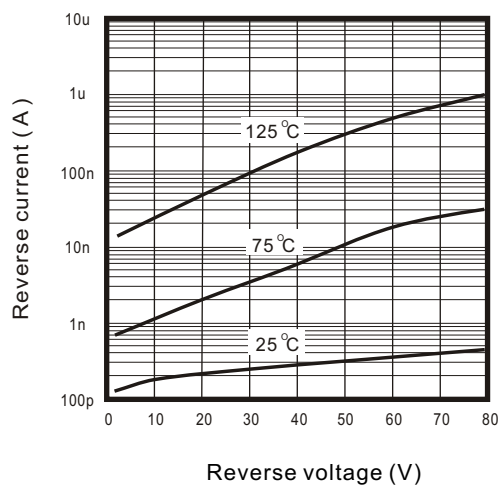


Fig. 3 - Capacitance between terminals characteristics

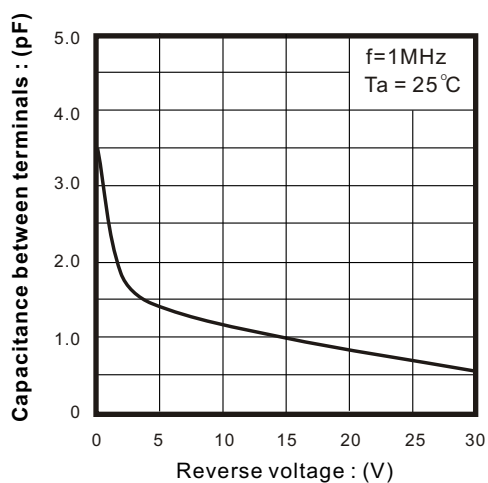


Fig. 4 - Current derating curve

