

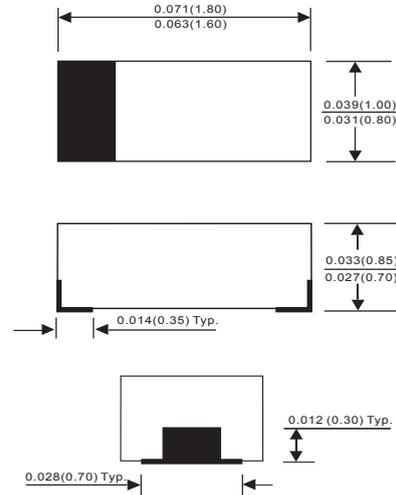


**SURFACE MOUNT HIGH SPEED SWITCHING DIODE**

**FEATURES:**

- Halogen free.
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low leakage current.
- High mounting capability, strong surge withstand, high reliability.

0603(1608)



**MECHANICAL DATA**

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

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

Mounting position: Any.

Weight: 0.003 gram (approx.).

Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1SS400	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	90	Volts
DC voltage	$V_R$	80	Volts
Peak forward current	$I_{FRM}$	225	mA
Maximum average forward rectified current at $T_a=25^\circ C$	$I_o$	100	mA
Maximum Peak forward surge current(1s)	$I_{FSM}$	1000	mA
Maximum instantaneous forward voltage drop per leg at $I_F=100mA$ (NOTE 2)	$V_F$	1.0	Volts
Maximum instantaneous reverse current at $V_R=80V$ $T_a=25^\circ C$	$I_R$	0.1	$\mu A$
Total capacitance (NOTE 1)	$C_T$	3.0	PF
Operating temperature range	$T_J$	125	$^\circ C$
Storage temperature range	$T_{stg}$	-55 to+125	$^\circ C$
Reverse recovery time	$T_{rr}$	4	nS

**NOTES:**

(1) Measured at 1.0MHZ and applied reverse of 0.5 Volts

(2) Pulse test: 300 $\mu s$  pulsewidth, 1% duty cycle



RATING AND CHARACTERISTIC CURVES

Fig. 1 - Forward characteristics

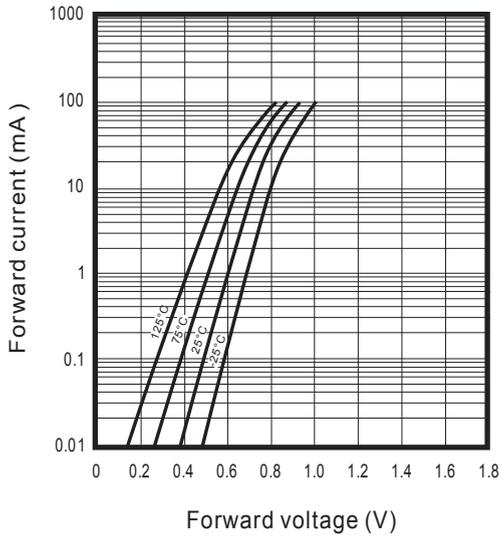


Fig. 2 - Reverse characteristics

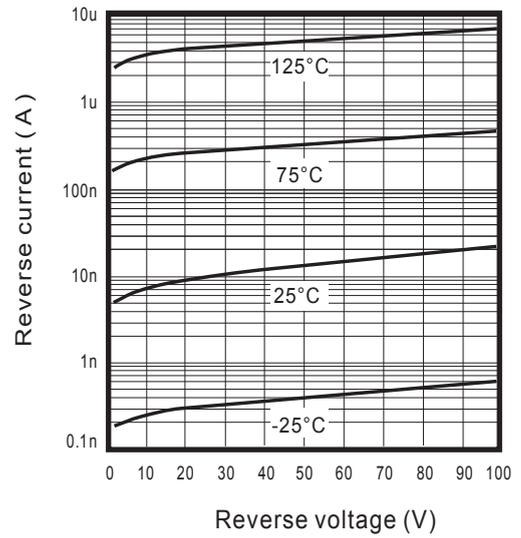


FIG.3-TYPICAL CAPACITANCE

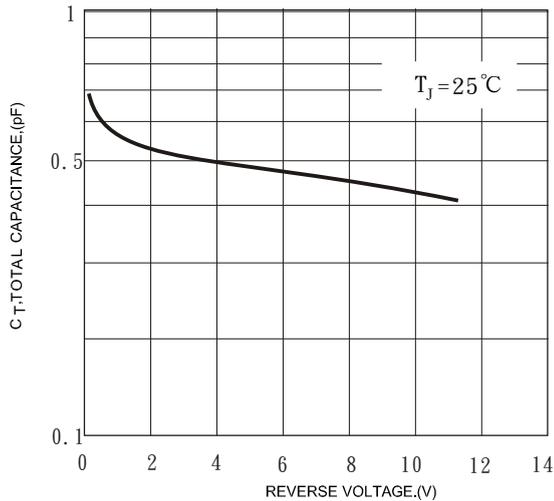
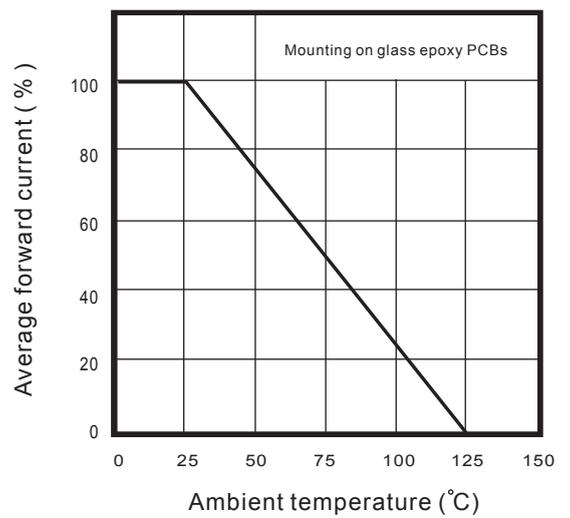


Fig. 4 - Current derating curve





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