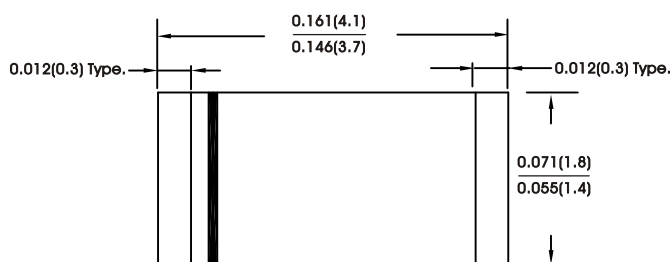


SOD-123**FEATURES:**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated ship junction
- Low leakage current

**MECHANICAL DATA**

Case : JEDEC SOD-123 / MINI SMA molded plastic

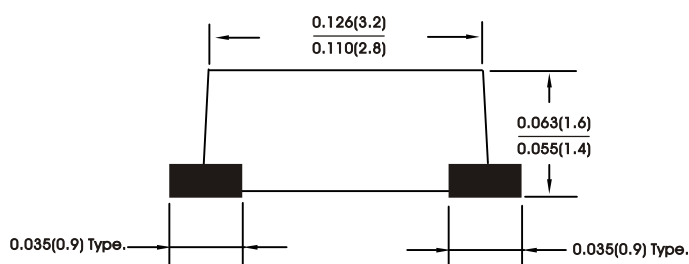
Terminals : Solder plated, solderable per MIL-STD-750

Method 2026

Polarity : Indicated by cathode band

Mounting Postition : Any

Weight : 0.04 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

Characteristic	Symbol	SM 4001-M	SM 4002-M	SM 4003-M	SM 4004-M	SM 4005-M	SM 4006-M	SM 4007-M	Units
	Marking	A1	A2	A3	A4	A5	A6	A7	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							Amps
Maximum instantaneous forward voltage $I_F = 1.0A$	V_F	1.1							Volts
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	5.0 50							μA
Typical junction capacitance(NOTE 1)	C_J	15							P_F
Operating temperature range	T_J	-55to +150							$^\circ\text{C}$
Storage temperature range	T_{Stg}	-55to +150							$^\circ\text{C}$

NOTES:

(1) Measured at 1MHz and applied reverse voltage of 4.0VDC.

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

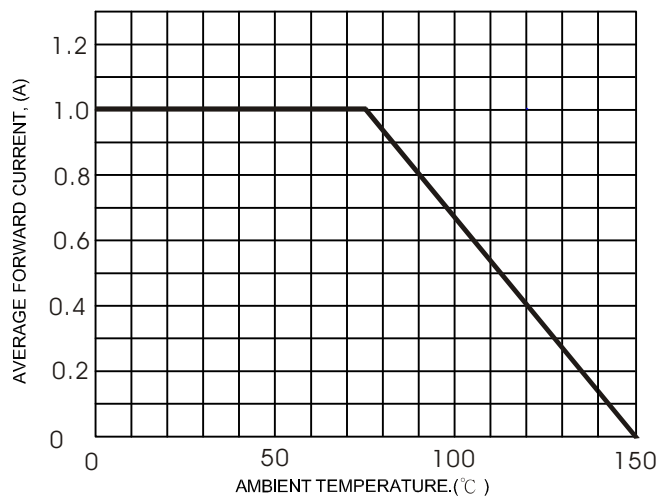


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

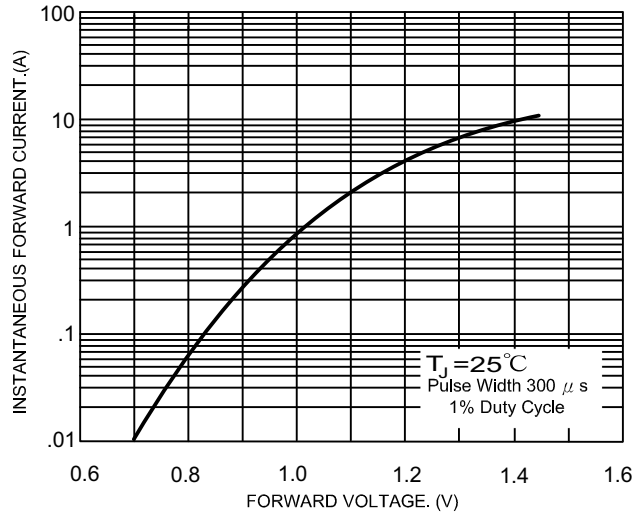


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

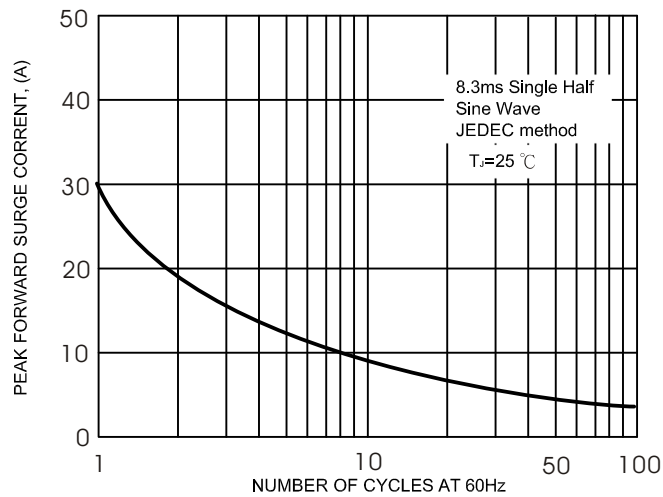


FIG.4- TYPICAL JUNCTION CAPACITANCE

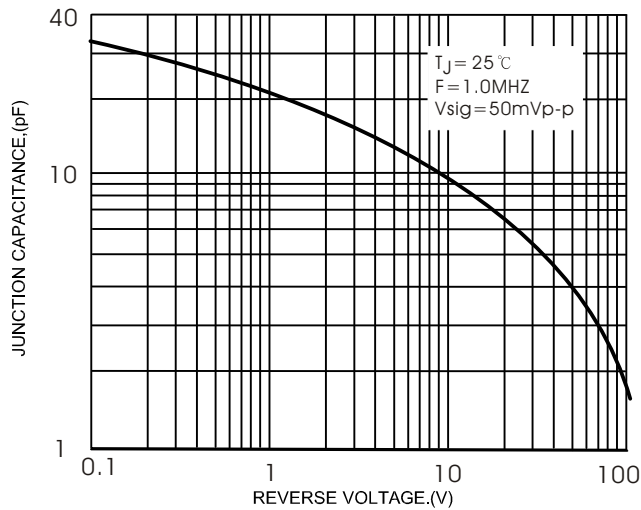


FIG.5- TYPICAL REVERSE CHARACTERISTICS

