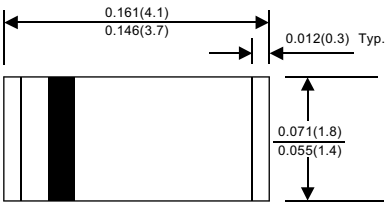
SM1A THRU SM1M

SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

MINI SMA / SOD-123

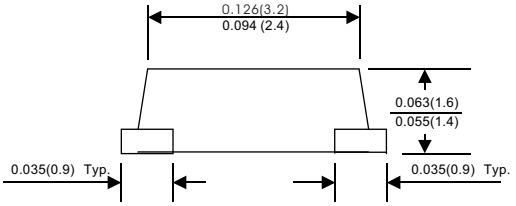
FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- For surface mounted applicatons
- Low leakage current



MECHANICAL DATA

Case: Molded plastic, JEDEC SOD-123 / MINI SMA
Terminals: Solder Plated,s solderable per MIL-STD-750, Method 2026
Polarity : Any
Mounting Position: Any
Weight:0.04g



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ 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	SM 1A	SM 1B	SM 1D	SM 1G	SM 1J	SM 1K	SM 1M	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 voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at See Fig.1 TL=75℃	$I_{(AV)}$	1.0							Amps
Peak forward surge current,8.3ms single half sine-wave auperimposed on rated load(JEDEC Methed)	I_{FSM}	30							Amps
Maximum instantaneous forward voltage drop per leg at 1.0A (NOTE 2)	V_F	1.1							Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) Ta=25℃ Ta=100℃	I_R	5.0 50							μA
Typical junction (NOTE 1)	C_J	15							PF
Typical thermal resistance from junction to ambient	Rth JA	60							℃/W
Operating temperature range	T_J	-55 to+150							℃
Storage temperature range	Tstg	-55 to+150							℃

NOTES:
(1) Measured at 1.0 MHZ and applied reverse of 4.0 Volts
(2)Pulse test : 300 us pulse width, 1% duty cycle

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

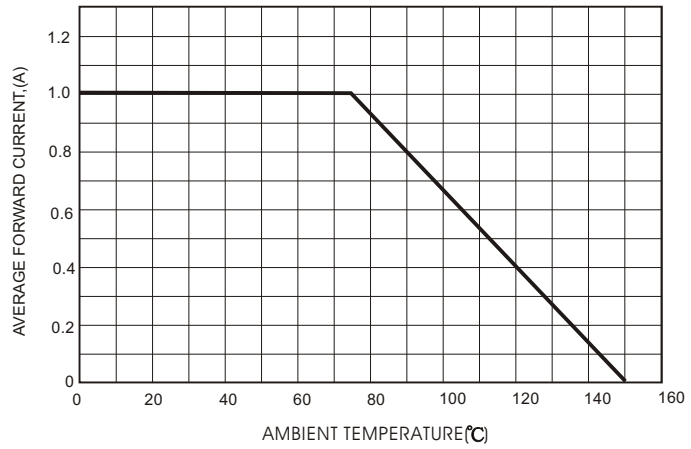


FIG.2-TYPICAL FORWARD CHARACTERISTICS

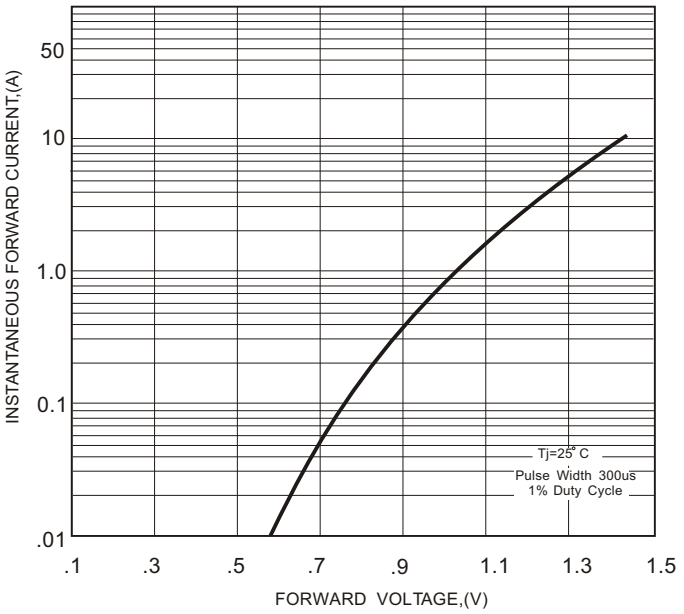


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

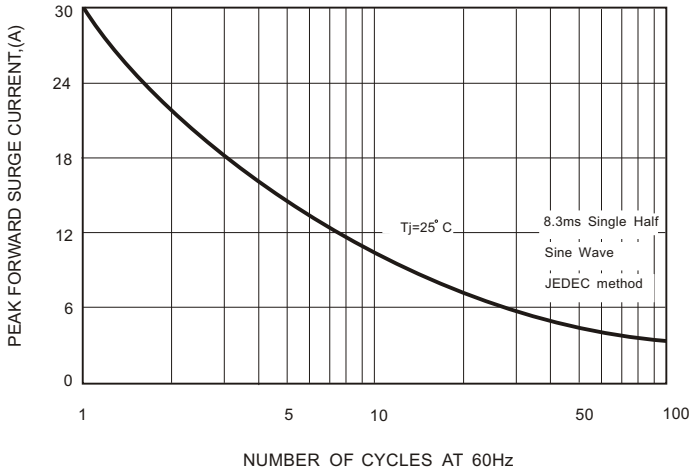


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

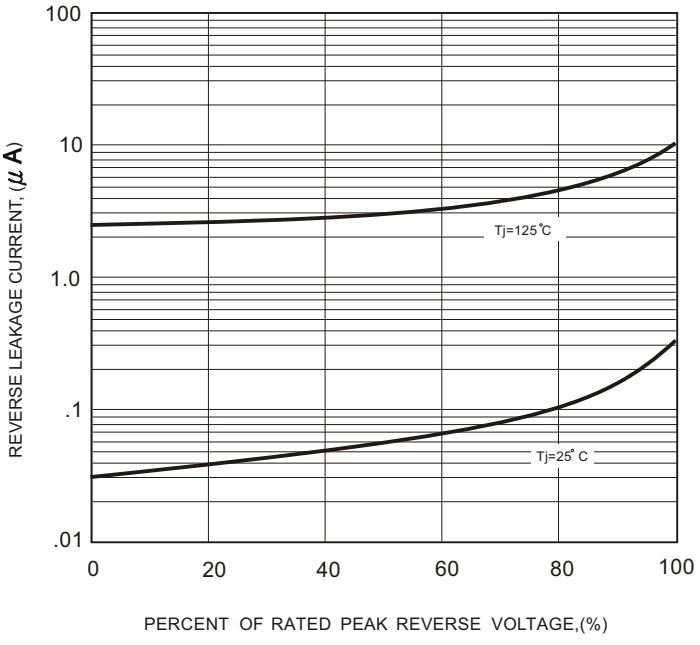


FIG.4-TYPICAL JUNCTION CAPACITANCE

