SURFACE MOUNT GLASS PASSIVATED RECTIFIERS

FEATURES:

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

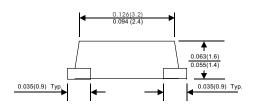
0.161(4.1) 0.146(3.7) 0.012(0.3) Typ. 0.071(1.8) 0.055(1.4)

MINI SMA / SOD-123

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 °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	SM	SM 1B	SM	SM	SM	SM	SM	Units
	Marking	1A A1	A2	1D A3	1G A4	1J A5	1K A6	1M A7	
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	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°C	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)	٧ _F	1.1							Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) $ Ta=25^{\circ}C $ $ Ta=100^{\circ}C $	IR	5.0 50							μΑ
Typical junction (NOTE 1)	cl	15							PF
Typical thermal resistance from junction to ambient	Rth JA	60							°C/W
Operating temperature range	TJ	-55 to+150							°C
Storage temperature range	Tstg	-55 to+150							°C

NOTES

(1) Measured at 1.0 MHZ and applied reverse of 4.0 Volts

(2)Pulse test: 300 us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

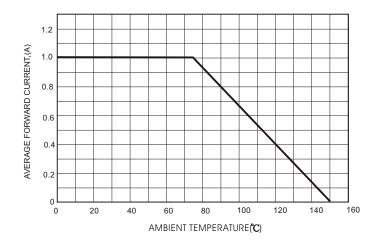


FIG.2-TYPICAL FORWARD CHARACTERISTICS

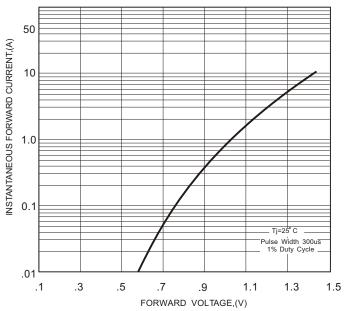


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

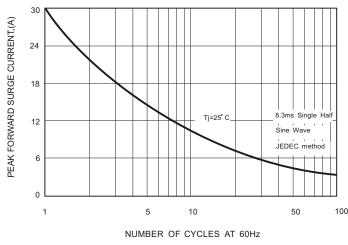


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

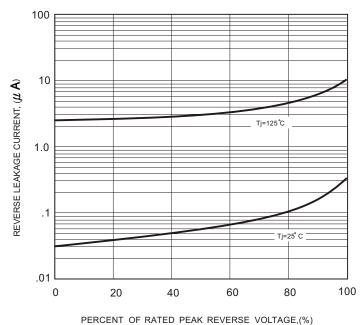
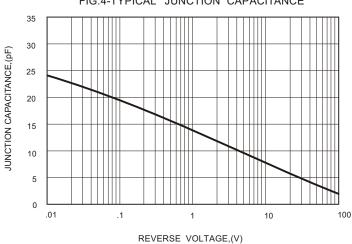


FIG.4-TYPICAL JUNCTION CAPACITANCE



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SM1A THRU SM1M

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