



SM4001 THRU SM4007

1.0AMP. Surface Mount Glass Passivated Silicon Rectifiers

Voltage Range
50 to 1000 Volts
Current
1.0 Amperes

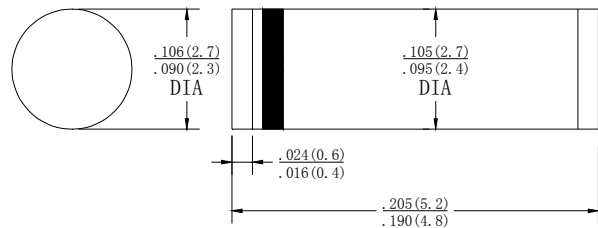
Features

- Plastic package has carries underwriters Laboratory flammability classification 94V-0
- Surge overload rating to 30 Amperes peak
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique results in in-expensive product.
- High temperature soldering guaranteed: 260°C / 10 seconds at terminals

Mechanical Data

- Solderability per MIL-STD-750, method 208 at terminals.
- Mounting position: Any
- Weight: 0.12 gram

MELF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA = 75°C	IF(AV)	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							A
Maximum Instantaneous Forward Voltage @1.0A	VF	1.1							V
Maximum DC Reverse Current @ TA=25°C at rated DC blocking voltage @ TA=125°C	IR	5.0 100							μA
Typical Thermal Resistance (Note)	RθJC	50							°C /W
Operating Temperature Range	TJ	-65 to +150							°C
Storage Temperature Range	TSTG	-65 to +150							°C

NOTE: Thermal Resistance from Junction to case. Mount on 0.2" x 0.2" Cu-pad on P.C.B.

RATING AND CHARACTERISTIC CURVES SM4001 THRU SM4007



FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMMENT

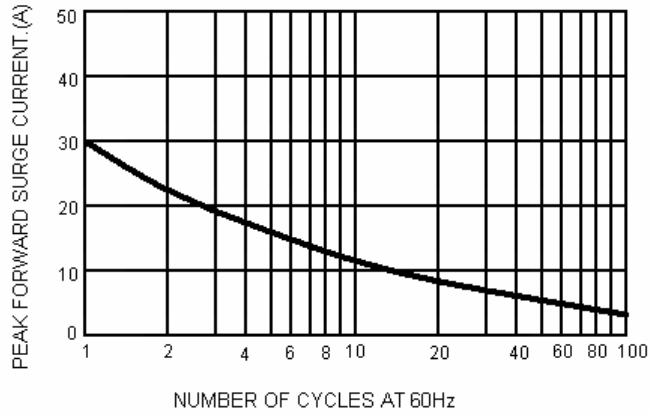


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

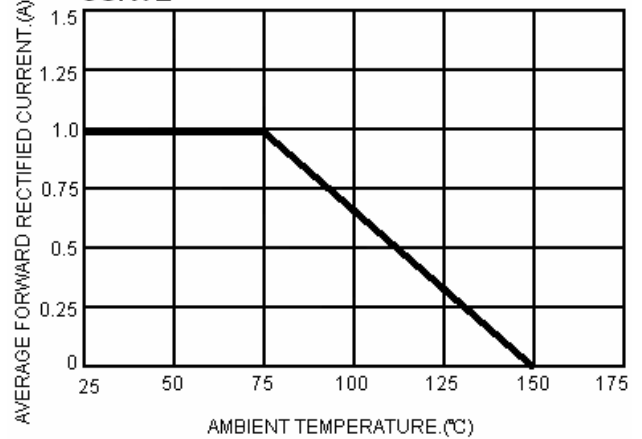


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

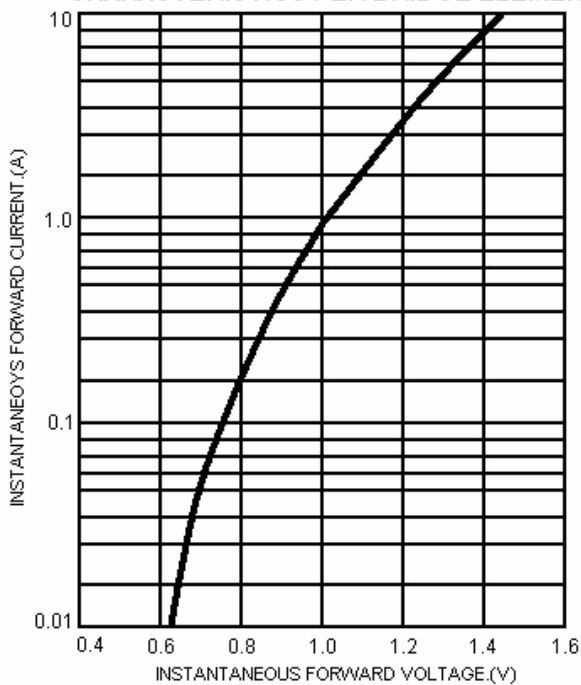


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

