

Kingtronics®**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

MELF

Dimensions in in inches and (millimeters)

Mechanical Data

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

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	SYMBOL	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
Maximum Recurrent 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				μ A
Typical Thermal Resistance (Note)	RθJA				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.

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RATING AND CHARACTERISTIC CURVES SM4001 THRU SM4007

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

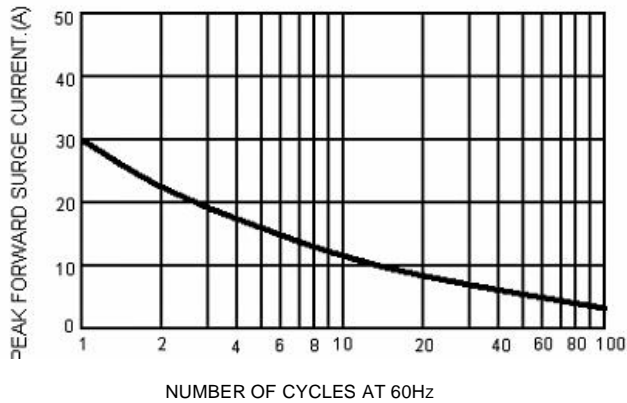


FIG. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

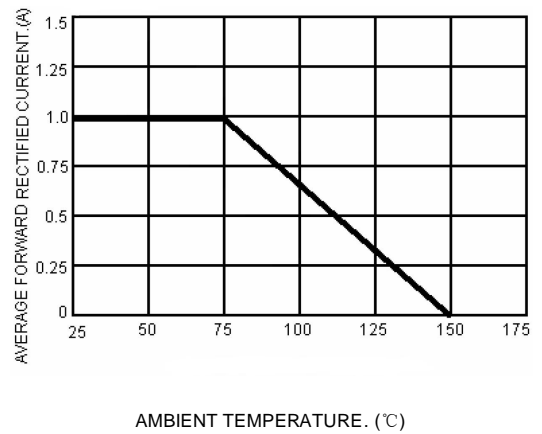


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

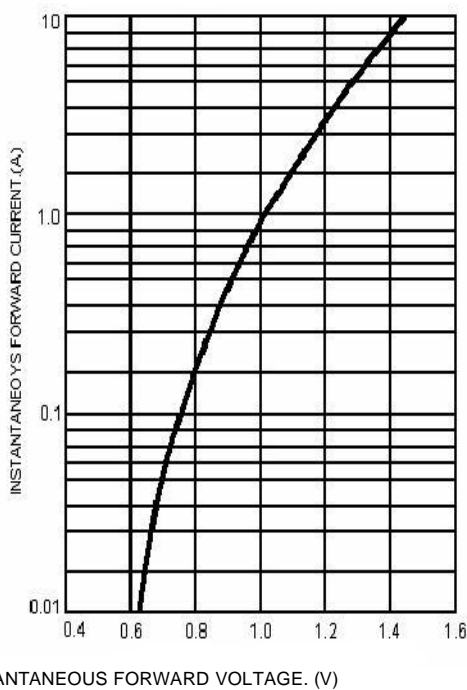
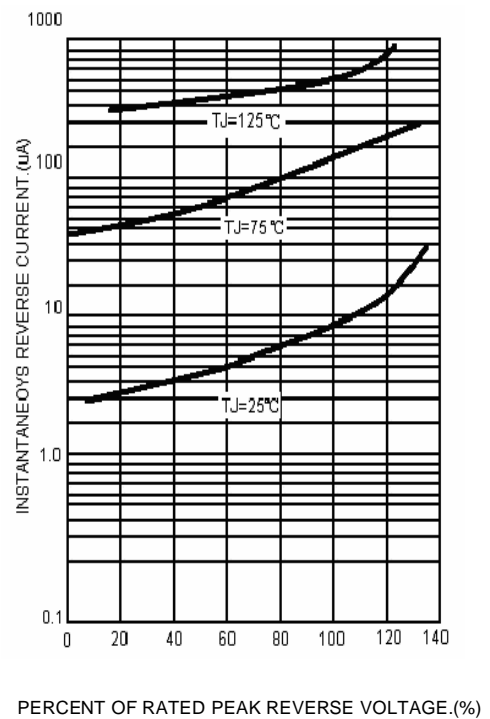


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice.