SM4001A THRU SM4007A



1.0 AMP SURFACE MOUNT SILICON RECTIFIERS



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

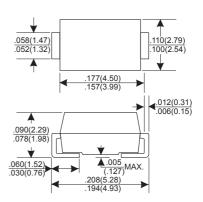
MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any * Weight: 0.063 gram

VOLTAGE RANGE 50 to 1000 Volts CURRENT

1.0 Ampere





Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SM4001A	SM4002A	SM4003A	SM4004A	SM4005A	SM4006A	SM4007A	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current								
See Fig. 2		1.0						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		30						Α
Maximum Instantaneous Forward Voltage at 1.0A		1.1					V	
Maximum DC Reverse Current Ta=25 ℃		5.0						
at Rated DC Blocking Voltage Ta=100 ℃		50						
Typical Junction Capacitance (Note 1)		15						pF
Typical Thermal Resistance RθJA (Note 2)		50						°C/W
Operating and Storage Temperature Range Тл, Тэтс		-65 — +175						

NOTES

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SM4001A THRU SM4007A)

FIG.1-TYPICAL FORWARD

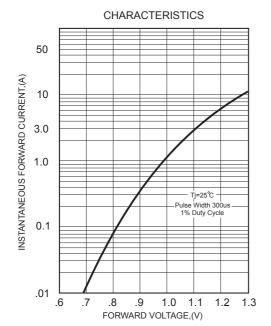


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

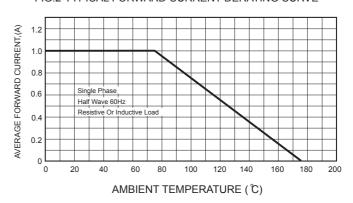


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

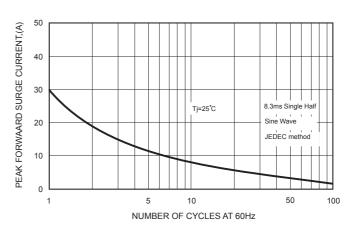


FIG.3 - TYPICAL REVERSE

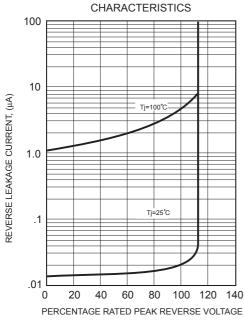


FIG.5-TYPICAL JUNCTION CAPACITANCE

