DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

THRU SM4007

SM4001

 TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SILICON RECTIFIER

 VOLTAGE RANGE - 50 to 1000 Volts
 CURRENT - 1.0 Ampere

FEATURES * Ideal for surface mounted applications * Low leakage current * Glass passivated junction SM-1(DO-213AB) MECHANICAL DATA * Case: Molded plastic .205 (5.2) SOLDERABLE * Epoxy: UL 94V-0 rate flame retardant .190 (4.8) ENDS *Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed * Polarity: Color band denotes cathode end .028 (.60) * Mounting position: Any .018 (.46) * Weight: 0.12 gram .106 (2.7) .095 (2.4) MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%. Dimensions in inches and (millimeters)

		SYMBOL	SM4001	SM4002	SM4003	SM4004	SM4005	SM4006	SM4007	UNITS
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 Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TA = 75°C		lo	1.0							Amps
Peak Forward Surge Current IFM(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	30							Amps
Maximum Forward Voltage at 1.0A DC		VF	1.1							Volts
Maximum DC Reverse Current at	@TA = 25°C	IR	5.0							uAmps
Rated DC Blocking Voltage	@TA = 125°C	IR	50							
Maximum Thermal Resistance (Note 2)		RθJL	20							°C/W
Typical Junction Capacitance (Note 1)		CJ	15							pF
Operating and Storage Temperature Range		TJ, TSTG	-65 to + 175							٥C

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

2. Thermal resistance (Junction to Ambient),.24in² (6.0mm²) coppeer pads to each terminal.

