



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**6A05M  
THRU  
6A10M**

**TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER**

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 6.0 Amperes

**FEATURES**

- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* High surge current capability

**MECHANICAL DATA**

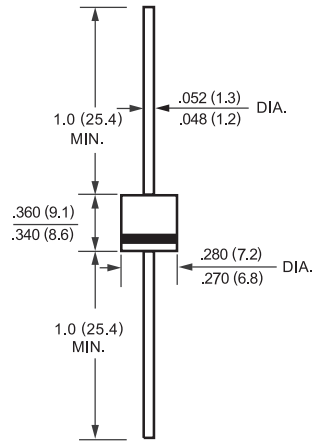
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.65 grams

**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%.



R-6M



Dimensions in inches and (millimeters)

	SYMBOL	6A05M	6A1M	6A2M	6A4M	6A6M	6A8M	6A10M	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 at TA = 60°C	IO	6.0							Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM					400				Amps
Maximum Instantaneous Forward Voltage at 6.0A DC	VF					1.1				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@ TA = 25°C				10				uAmps
		@ TA = 100°C				500				
Maximum Full Load Reverse Current Average Full Cycle .375" (9.5mm) lead length at TL = 75°C						50				uAmps
Typical Junction Capacitance (Note)	CJ					150				pF
Typical Thermal Resistance	R θJA					10				°C/W
Operating and Storage Temperature Range	TJ, TSTG					-65 to +175			°C	

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (6A05M THRU 6A10M)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

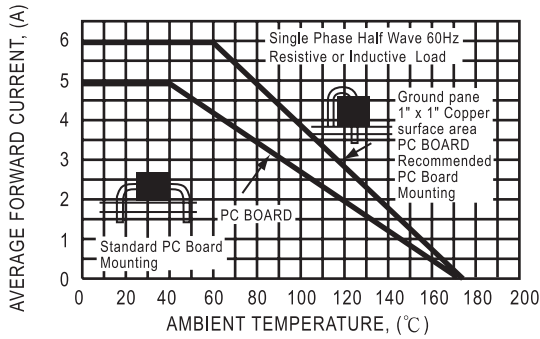


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

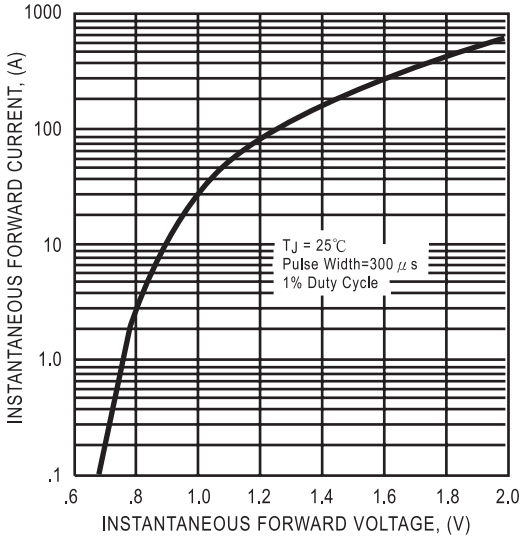


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

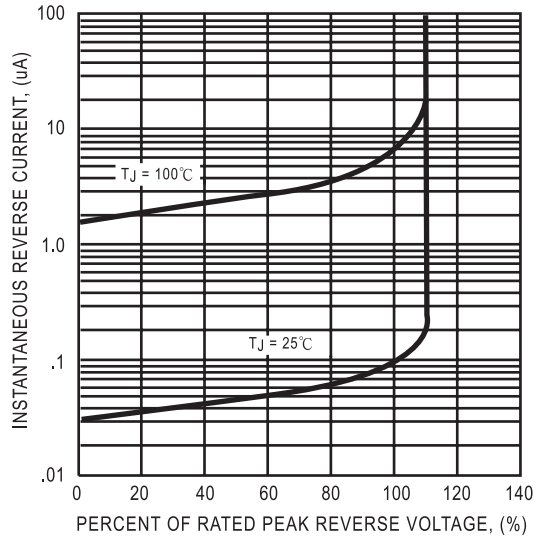


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

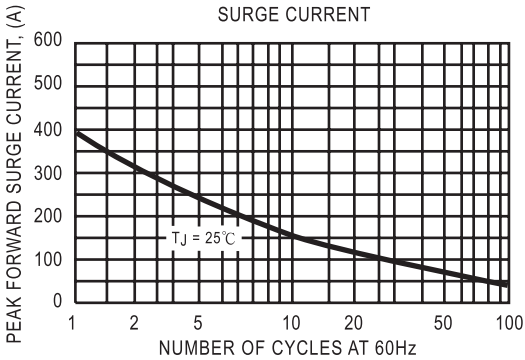
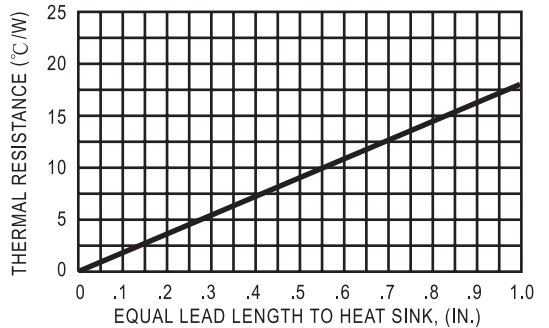


FIG. 5 - TYPICAL THERMAL RESISTANCE VS LEAD LENGTH



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