HITANO ENTERPRISE CORP.

6A05M THRU 6A10M

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 6.0 Amperes

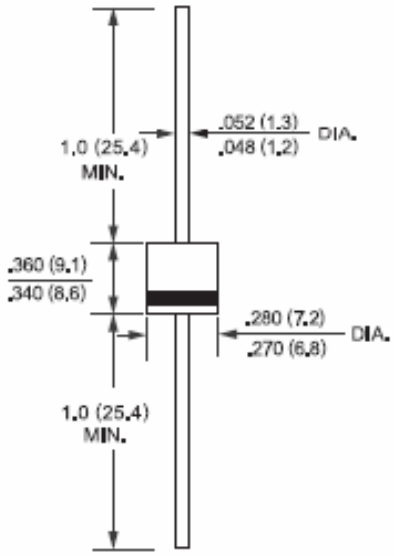
FEATURES

* 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

R-6M



Dimensions in inches and (millimeters)

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%.

		SYMBOL	6A05M	6A1M	6A2M	6A4M	6A6M	6A8M	6A10M	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_A = 60°C		I_O	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	400							Amps
Maximum Instantaneous Forward Voltage at 6.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	10							uAmps
	@T_A = 100°C		500							
Maximum Full Load Reverse Current Average Full Cycle .375*(9.5mm) lead length at T_L = 75°C			50							uAmps
Typical Junction Capacitance (Note)		C_J	150							pF
Typical Thermal Resistance		$R_{\theta JA}$	10							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-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

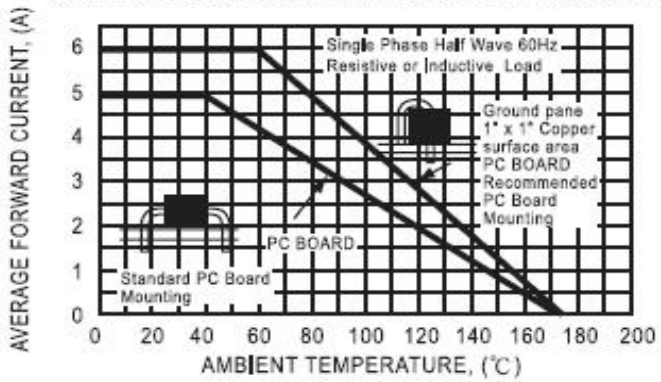


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

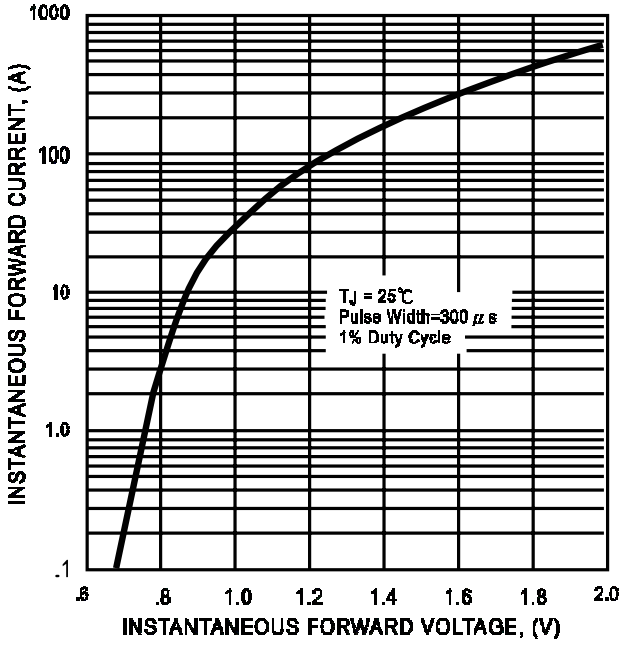


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

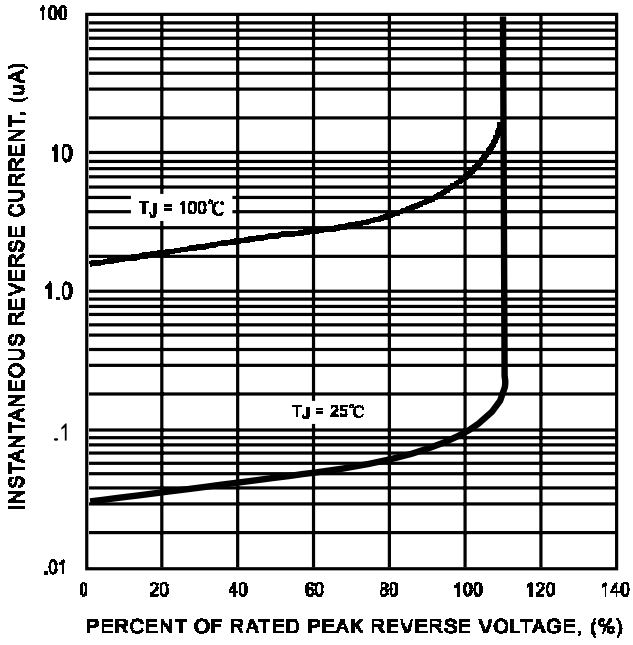


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

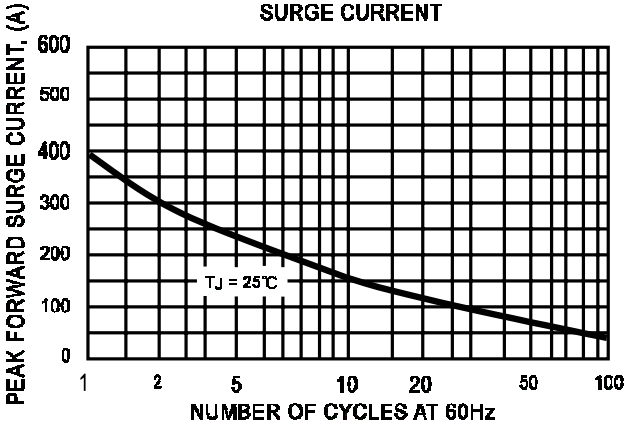


FIG. 5 - TYPICAL THERMAL RESISTANCE VS LEAD LENGTH