DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

MP8005 THRU MP810

TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

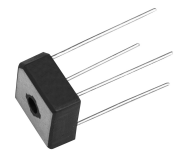
VOLTAGE RANGE - 50 to 1000 Volts *CURRENT - 8.0 Amperes*

FEATURES

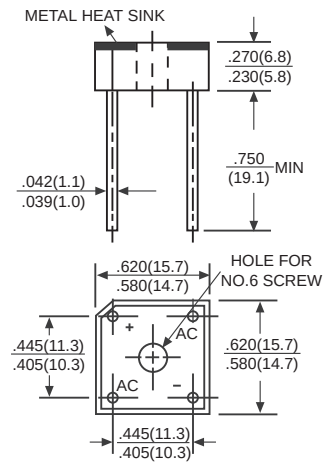
* Surge overload rating: 125 Amperes peak
* Low forward voltage drop
* Small size: simple installation

MECHANICAL DATA

* Case: Molded plastic with heatsink
* Epoxy: UL 94V-0 rate flame retardant
* Lead: MIL-STD-202E, Method 208 guaranteed
* Polarity: Symbols molded or marked on body
* Mounting position: Any
* Weight: 6.1 grams



MP-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

		SYMBOL	MP8005	MP801	MP802	MP804	MP806	MP808	MP810	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at T_C = 75°C		I_O	8.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	125							Amps
Maximum Forward Voltage Drop per element at 4.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@T_A = 25°C	I_R	10							μAmps
	@T_C = 100°C		500							
Operating Temperature Range		T_J	-55 to +125							°C
Storage Temperature Range		T_{STG}	-55 to +150							°C

RATING AND CHARACTERISTIC CURVES (MP8005 THRU MP810)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

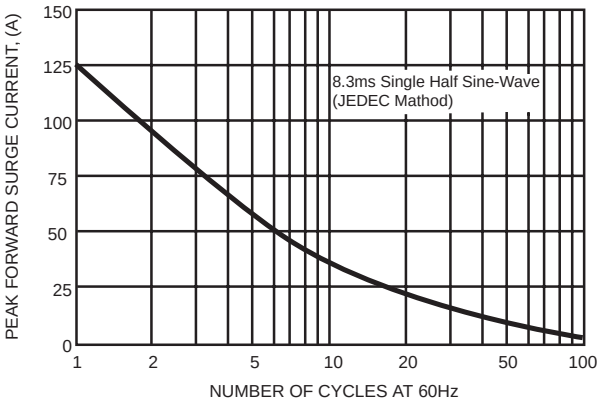


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

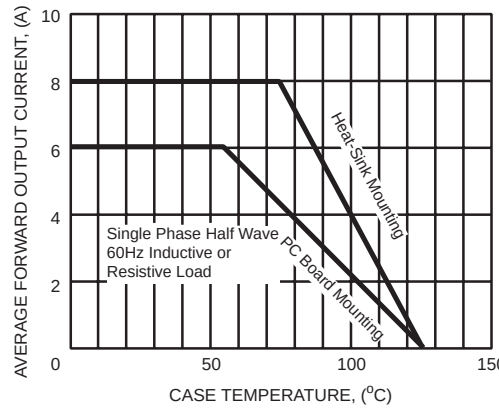


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

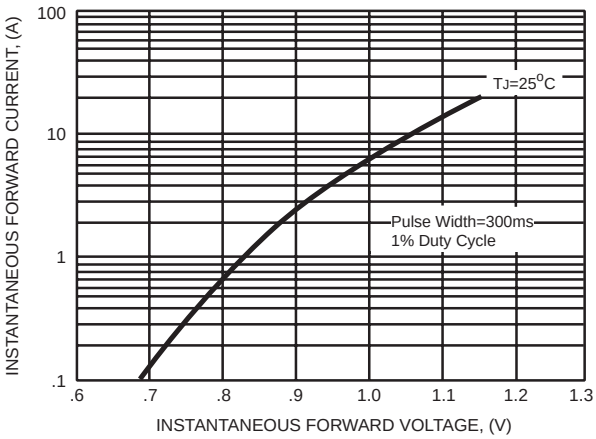


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS