

DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

MP10005
THRU
MP1010

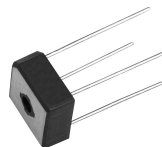
TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 10 Amperes

FEATURES

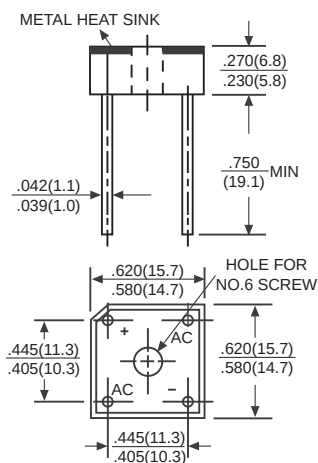
- * Surge overload rating: 200 Amperes peak
- * Low forward voltage drop
- * Small size: simple installation



MP-6

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



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	MP1005	MP1001	MP1002	MP1004	MP1006	MP1008	MP1010	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 $T_c = 50^{\circ}C$		I_o	10							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	200							Amps
Maximum Forward Voltage Drop per element at 5.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^{\circ}C$	I_R	10							μ Amps
	@ $T_C = 100^{\circ}C$		500							
Operating Temperature Range		T_J	-55 to +125							$^{\circ}C$
Storage Temperature Range		T_{STG}	-55 to +150							$^{\circ}C$

RATING AND CHARACTERISTIC CURVES (MP10005 THRU MP1010)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

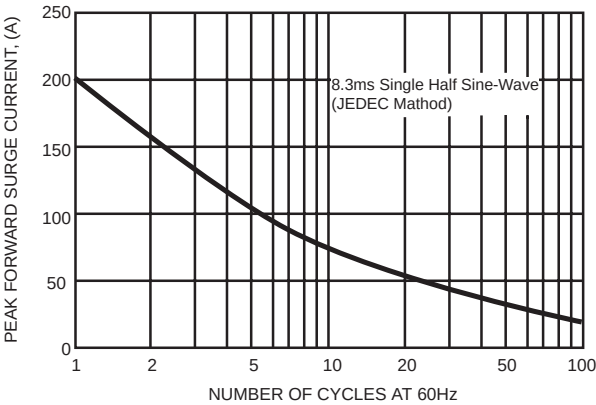


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

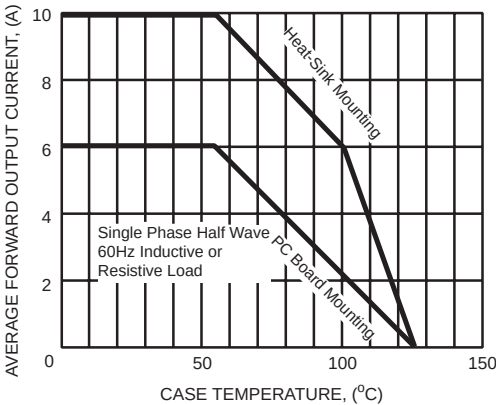


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

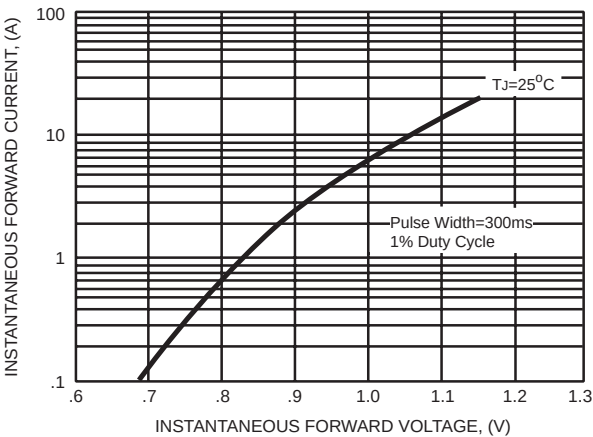


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

