

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**

VOLTAGE RANGE 50 to 1000 Volts CURRENT 40 Amperes

FEATURES

- * Superior thermal desing
- * 400 amperes surge rating
- * 1/4" universal faston terminal
- * Hole thru for # 10 screw

MECHANICAL DATA

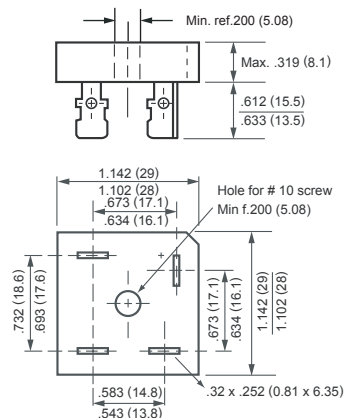
- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

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%.



MP-40



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	MP4005	MP401	MP402	MP404	MP406	MP408	MP4010	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 Rectified Output Current at Tc = 55°C	I _O	40.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	400							Amps
Typical Current Squarad Time	I ² t	664							A ² /Sec
RMS isolation voltage from case to lead	V _{ISO}	2500							Volts
Typical Thermal Resistance (from junction to case)	R _{θJC}	1.5							°C/W
Typical Thermal Resistance (from junction to ambient)	R _{θJA}	19							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MP4005	MP401	MP402	MP404	MP406	MP408	MP4010	UNITS	
Maximum Forward Voltage Drop per element at 20A DC	V _F					1.1				Volts
Maximum Reverse Current at Rated	I _R					5.0				uAmps
DC Blocking Voltage per element						0.2				mAmps

NOTE: 1. Suffix "W" for wire type
2. RoHS compliant

RATING AND CHARACTERISTIC CURVES(MP4005 THRU MP4010)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

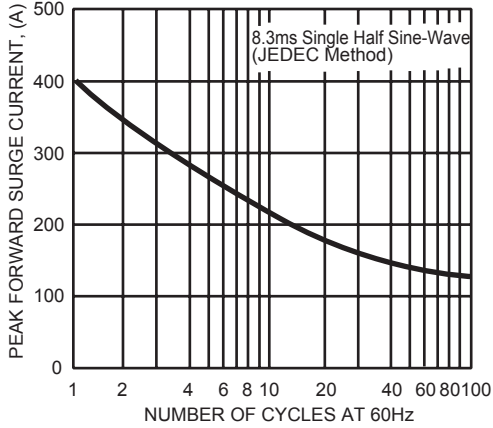


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

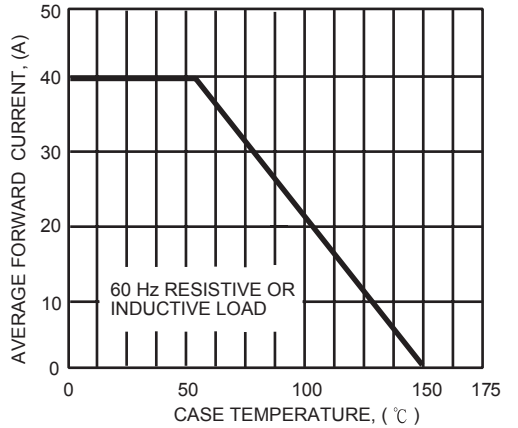


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

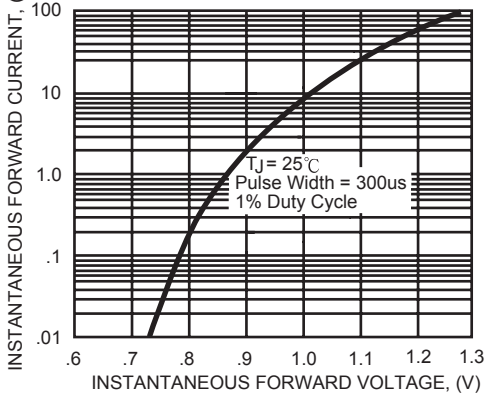
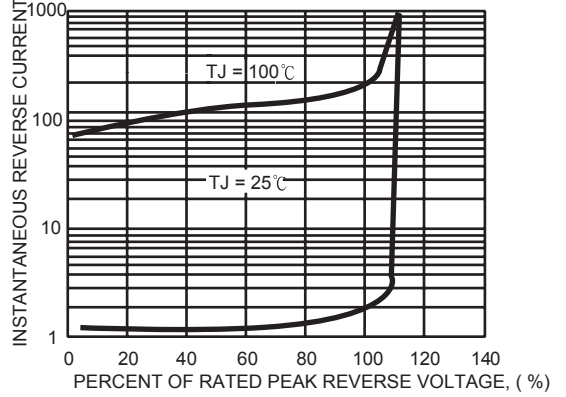


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

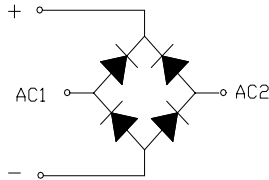




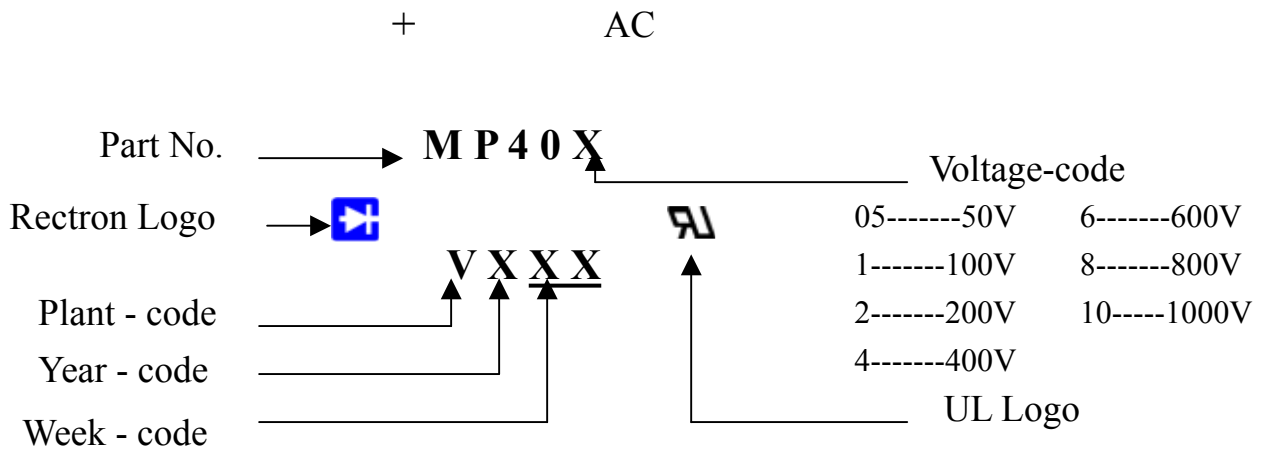
RECTRON

Attachment information about MP40X

1. Internal Circuit



2. Marking on the body



3. Items marked on the inner box and carton

3.1 On the box (for -B)

CUSTOMER
TYPE
LOT NO.
QUANTITY
Q.A.
DATE

3.2 On the carton

CUSTOMER
TYPE
QUANTITY
LOT NO.
REMARK

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MP-40/-50	-B	50	206*208*45.5	450*220*255	500	9.6

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