



MASTER INSTRUMENT CORPORATION

SINGLE-PHASE BRIDGE RECTIFIER
MB3505W THRU MB3510W
KBPC35005W THRU KBPC3510W

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 35 Amperes

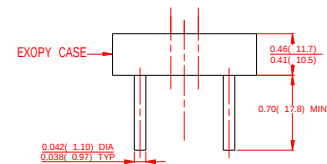
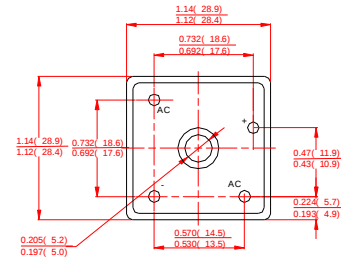
FEATURES

- ┌ Low cost
- ┌ This series is UL recognized under component index, file number E127707
- ┌ High forward surge current capability
- ┌ Ideal for printed circuit board
- ┌ High isolation voltage from case to leads
- ┌ High temperature soldering guaranteed: 260°C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- ┌ Case: Molded plastic body
- ┌ Terminal: Plated 0.25" (6.35mm) lug.
- ┌ Polarity: Polarity symbols marked on case
- ┌ Mounting: Thru hole for #10 screw, 20 in.-lbs torque max.
- ┌ Weight: 0.93 ounce, 26.4 grams

MB-35W



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%.

	SYMBOLS	MB3505W KBPC35005W	MB251W KBPC2501W	MB252W KBPC2502W	MB254W KBPC2504W	MB256W KBPC2506W	MB258W KBPC2508W	MB2510W KBPC2510W	UNITS	
Maximum Repetitive 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 Output Current, at T _C =55°C (Note1,2)	I _(AV)	35							Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	400							Amps	
Rating for Fusing(t<8.3ms)	I ² T	664							A ² S	
Maximum Instantaneous Forward Voltage at 17.5A		V _F							1.1	Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25°C	I _R	10							μAmps
	T _A =100°C		1.0							mAmps
Isolation Voltage from case to lugs		V _{ISO}							2500	V _{AC}
Typical Thermal Resistance (Note 1,2)		R _{θJC}							2.0	°C/W
Operating Temperature Range		T _J							-55 to +150	°C
Storage Temperature Range		T _{STG}							-55 to +150	°C
NOTES:										
1. Unit mounted on 9”×3.5”×4.6”(23×9×11.8mm) Al. finned plate.										
2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.										
3. Suffix “W” designates Wire Lead										



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RATINGS AND CHARACTERISTIC CURVES MB3505W THRU MB3510W

FIG.1-TYPICAL FORWARD CURRENT

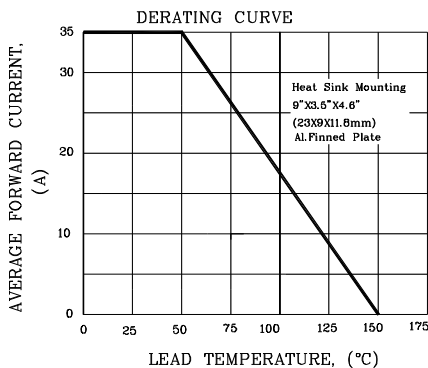


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

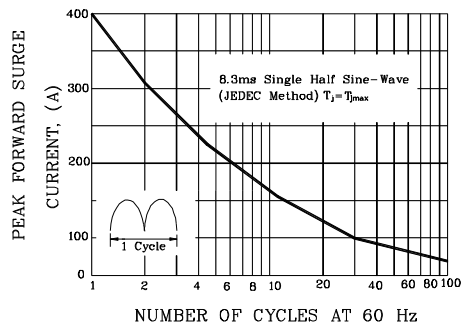


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

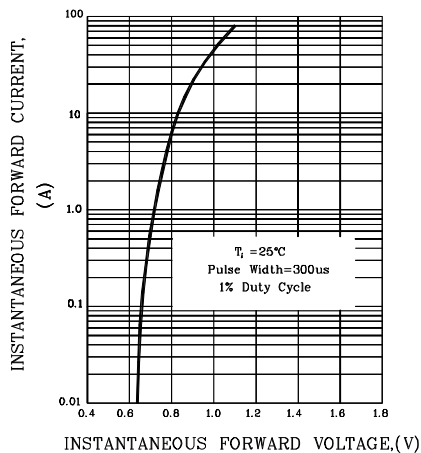


FIG.4-TYPICAL REVERSE CHARACTERISTICS

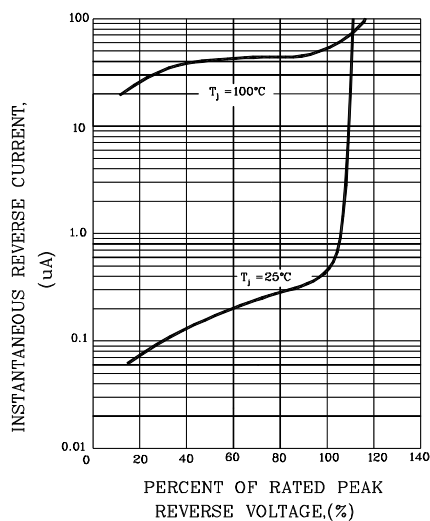


FIG.5-TYPICAL JUNCTION CAPACITANCE

