

**SINGLE-PHASE BRIDGE RECTIFIER**  
**MB3505W THRU MB3510W**  
**KBPC35005W THRU KBPC3510W**

**VOLTAGE RANGE** 50 to 1000 Volts  
**CURRENT** 35 Amperes

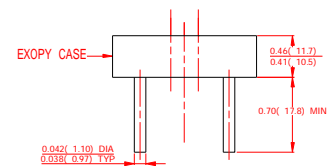
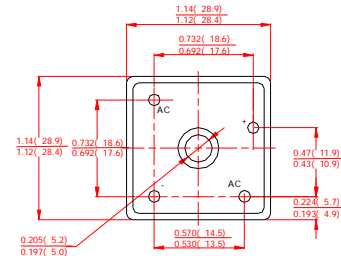
**FEATURES**

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

**MECHANICAL DATA**

- l Case: Molded plastic body
- l Terminal: Plated 0.25" (6.35mm) lug.
- l Polarity: Polarity symbols marked on case
- l Mounting: Thru hole for #10 screw, 20 in.-lbs torque max.
- l 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 $T_C=55^\circ\text{C}$ (Note 1,2)	$I_{(AV)}$	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 ( $t < 8.3\text{ms}$ )	$I^2t$	664							$\text{A}^2\text{S}$
Maximum Instantaneous Forward Voltage at 17.5A	$V_F$	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	10							$\mu\text{Amps}$
	$T_A=100^\circ\text{C}$	1.0							mAmps
Isolation Voltage from case to lugs	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 1,2)	$R_{\theta JC}$	2.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

**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

**SINGLE-PHASE BRIDGE RECTIFIER**  
**MB3505W THRU MB3510W**  
**KBPC35005W THRU KBPC3510W**

**VOLTAGE RANGE** 50 to 1000 Volts  
**CURRENT** 35 Amperes

RATINGS AND CHARACTERISTIC CURVES MB3505W THRU MB3510W

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

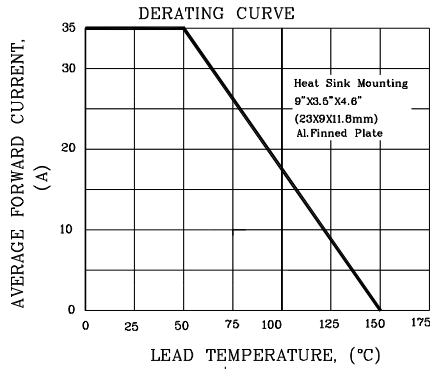


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

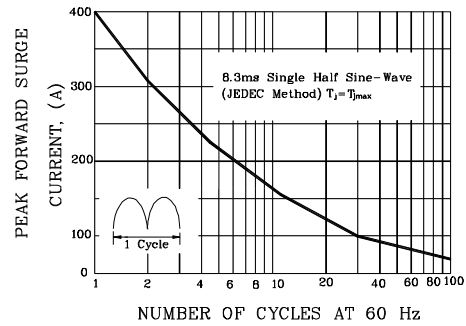


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

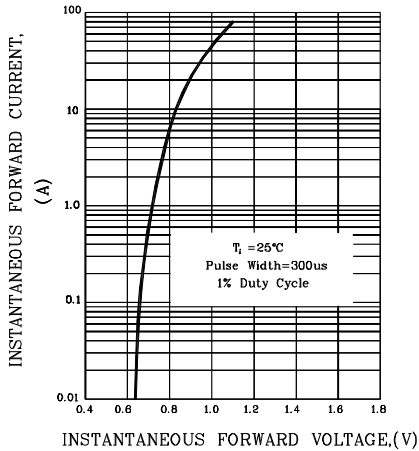


FIG.4-TYPICAL REVERSE CHARACTERISTICS

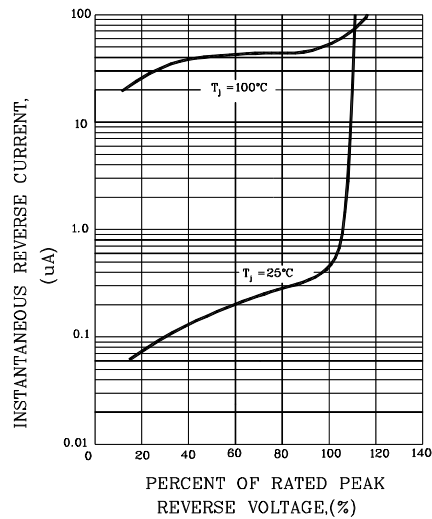


FIG.5-TYPICAL JUNCTION CAPACITANCE

