

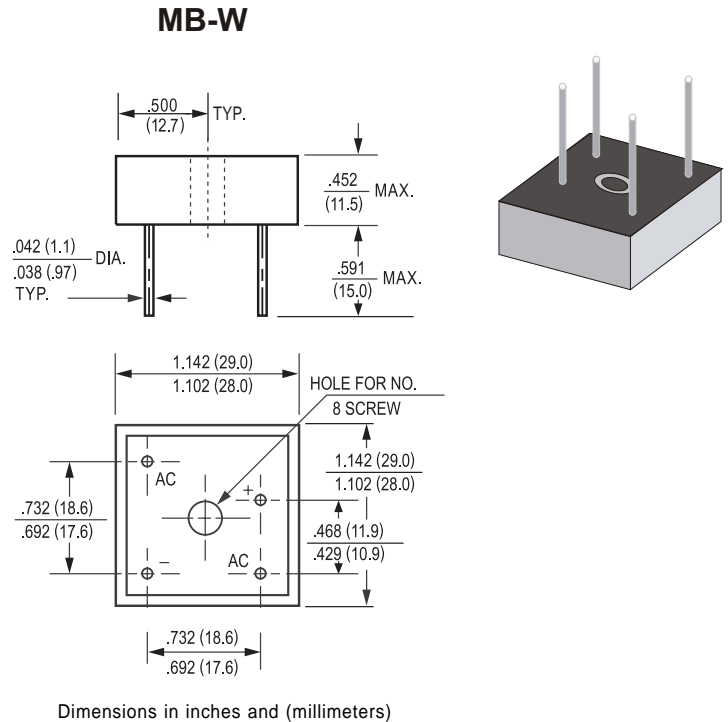
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 15 A**

### Features

- Metal case for Maximum Heat Dissipation
- Surge overload ratings-300 Amperes
- Low forward voltage drop

### Mechanical Data

- Case: Metal, electrically isolated
- Epoxy: UL 94V-0 rate flame retardant
- Lead: MIL-STD-202E, Method 208 guaranteed
- Polarity: As marked
- Mounting position: Any
- Weight: 30 grams



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MB1505W	MB151W	MB152W	MB154W	MB156W	MB158W	MB1510W	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current, at $T_{\theta} = 55^\circ\text{C}$ (Note 1, 2)	$I_{(AV)}$	15							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method )	$I_{FSM}$	300							Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	373							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage Drop per bridge element at 7.5A	$V_F$	1.1							Volts
Maximum DC Reverse Current at rated $T_A = 25^\circ\text{C}$ DC blocking voltage per element $T_A = 100^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
		1.0							mA
Isolation Voltage from case to leads	$V_{ISO}$	2500							$V_{AC}$
Typical Thermal Resistance (Note 1,2)	$R_{\theta JC}$	2.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	(-65 to +150)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-65 to +150)							$^\circ\text{C}$

1. Unit mounted on 5" X 4" X 3" (12.8cm X 10.2cm X 7.3cm)Al. finned Plate.

2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting surface for maximum heat transfer efficiency with # 10 screw.

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

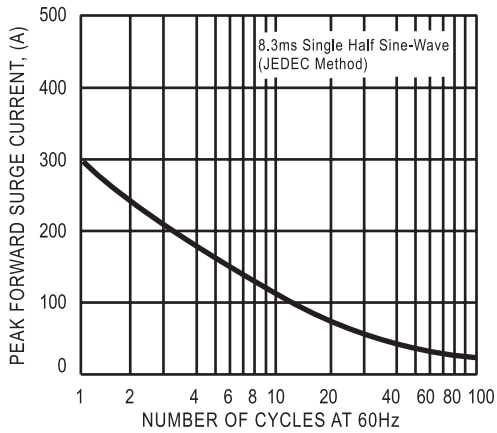


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

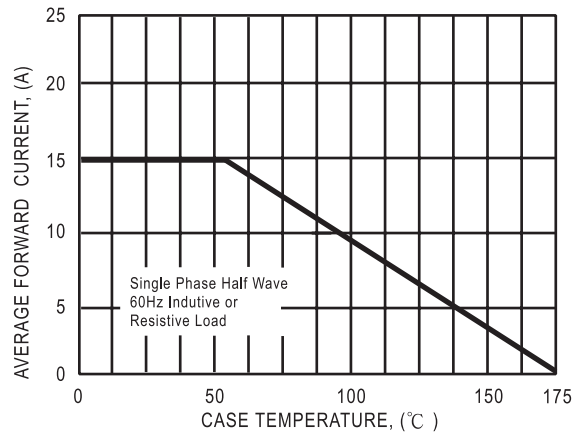


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

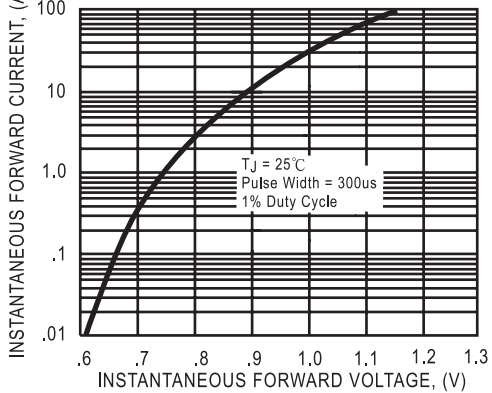


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

