

VOLTAGE RANGE: 50 - 1000V

CURRENT: 25 A

Features

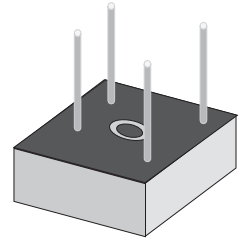
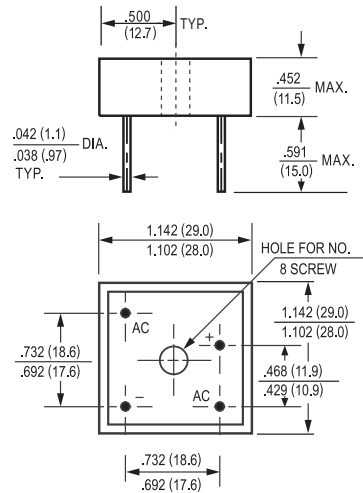
- Metal case for Maximum Heat Dissipation
- Surge overload ratings-400 Amperes
- Low forward voltage drop

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



MB-25W



Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	MB2505W	MB251W	MB252W	MB254W	MB256W	MB258W	MB2510W	Unit
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)	$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							Amps
Rating for Fusing ($t_l < 8.3\text{ms}$)	I^2t	373							A^2S
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.1							Volts
Maximum DC Reverse Current at	$T_A=25^\circ\text{C}$	10							μAmps
	$T_A=100^\circ\text{C}$	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							$^\circ\text{C/W}$
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 5"×6"×4.9 (12.8×15.2×12.4mm) 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



FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

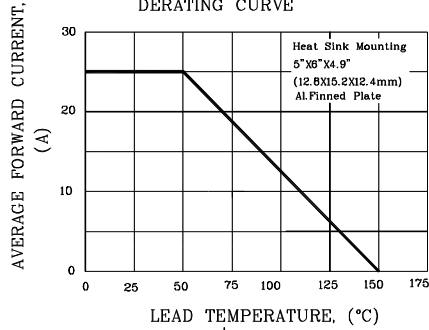


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

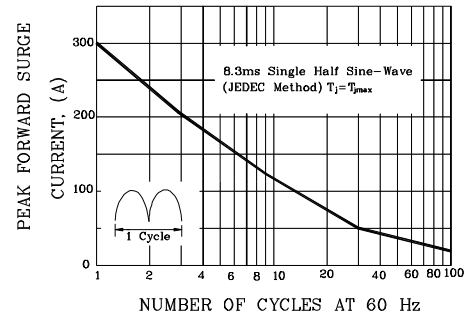


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

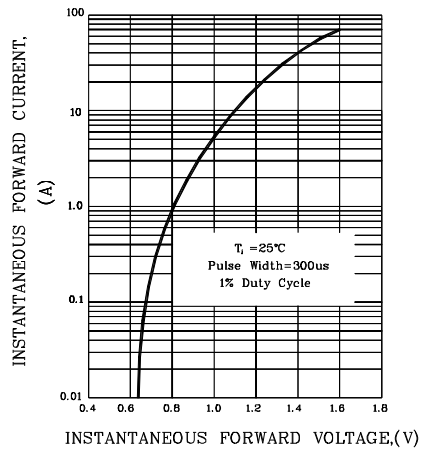


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

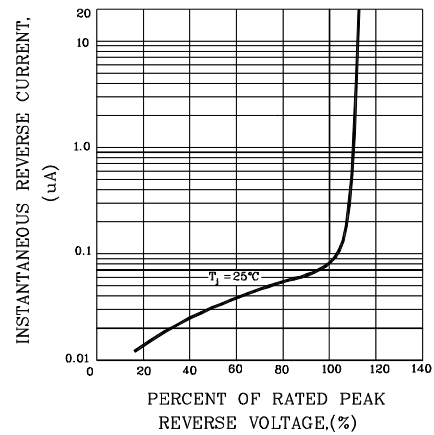


FIG.5-TYPICAL JUNCTION CAPACITANCE

