

VOLTAGE RANGE: 50 - 1000V
CURRENT: 25 A

Features

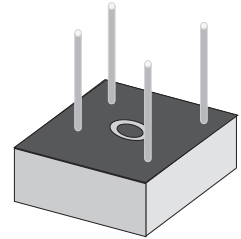
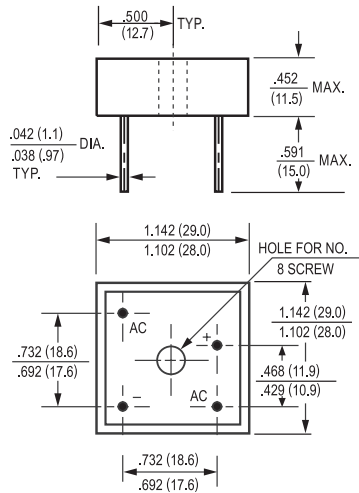
- Metal case for Maximum Heat Dissipation
- Surge overload ratings-400 Amperes
- Low forward voltage drop

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°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 TC=55 (Note 1,2)	I _(AV)	25							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 < 8.3ms)	I ² T	373							A ² S
Maximum Instantaneous Forward Voltage at 5.0A	V _F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _A =25	10							μAmps
	T _A =100	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 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

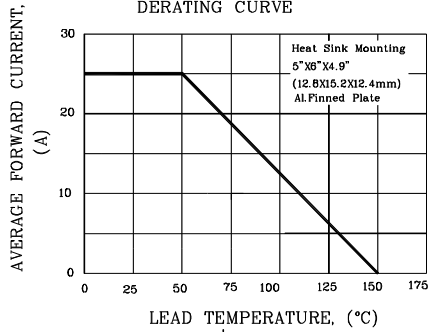


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

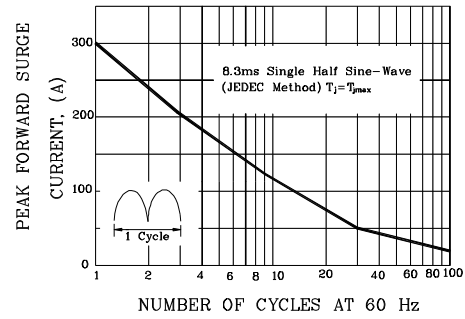


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

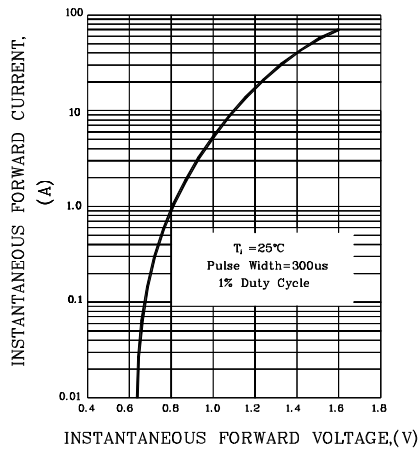


FIG.4-TYPICAL REVERSE CHARACTERISTICS

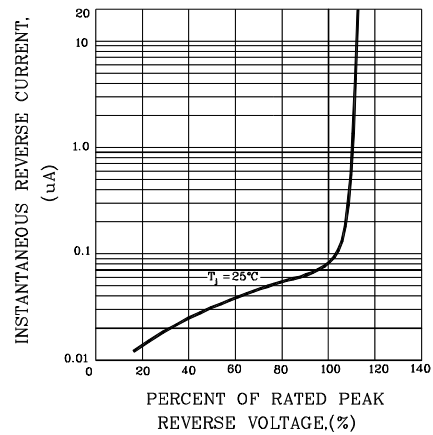


FIG.5-TYPICAL JUNCTION CAPACITANCE

