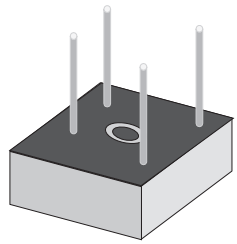
MB3505W-MB3510W

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE RANGE: 50 - 1000V
CURRENT: 35 A



Features

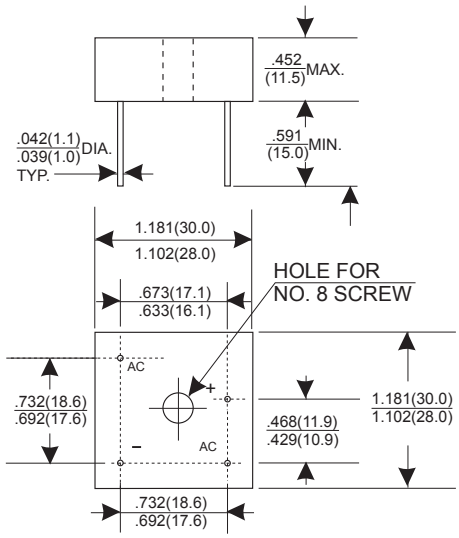
- Metal case Maximum Heat Dissipation
- Surge overload ratings-400 Amperes
- Low forward voltage drop

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

RoHS COMPLIANT

MB-35W



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	MB3505W	MB351W	MB352W	MB354W	MB356W	MB358W	MB3510W	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_C= 50℃ (Note 1,2)	$I_{(AV)}$	35							A
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	400							A
Rating for Fusing (t\<8.3ms)	I^2t	664							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	V_F	1.1							V
Maximum DC Reverse Current at rated DC blocking voltage per element	I_R	T_A = 25 : 10 T_A = 100℃ : 1.0							μA mA
Isolation Voltage from case to leads.	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range Storage Temperature Range	T_J T_{STG}	(-65 to +150) (-65 to +150)							℃

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

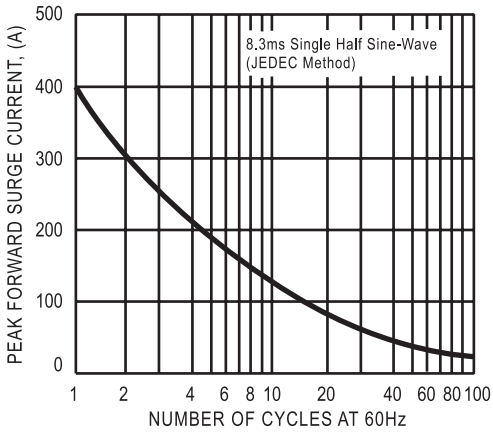


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

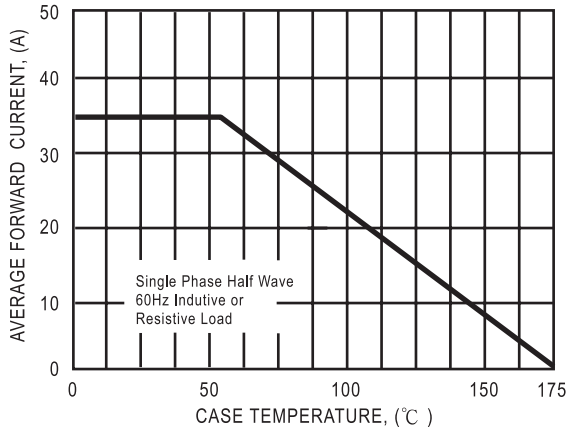


FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

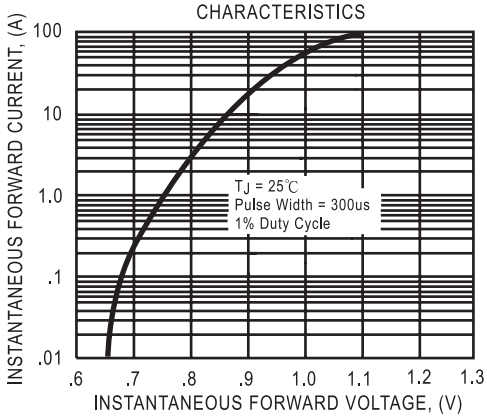


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS