**VOLTAGE RANGE: 50 - 1000V**
CURRENT: 35A

MB-35

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
- Terminals: Plated .25"(6.35mm) Faston lugs,
  solderable per MIL-STD-202E, Method 208 guaranteed
- Polarity: As marked
- Mounting position: Any
- Weight: 30 grams

RoHS COMPLIANT

Dimensions in inches and (millimeters)
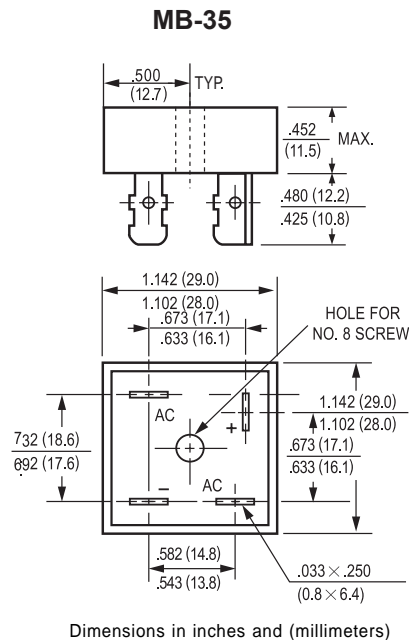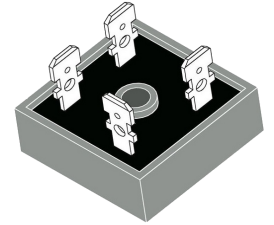
Maximum Ratings and Electrical Characteristics $T_A = 25°C$ unless otherwise specified

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

Characteristic		Symbol	MB3505	MB351	MB352	MB354	MB356	MB358	MB3510	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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°C		I_O	35							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	400							Amps
Maximum Forward Voltage Drop per element at 17.5A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@T_A = 25°C	I_R	10							uAmps
	@T_A = 100°C		500							
I^2 t Rating for Fusing (t\<8.3ms)		I^2t	664							A^2Sec
Typical Junction Capacitance (Note1)		C_J	300							pF
Typical Thermal Resistance (Note 2)		$R\theta JC$	2.2							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 to + 150							°C

NOTES : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance from Junction to Case per leg.

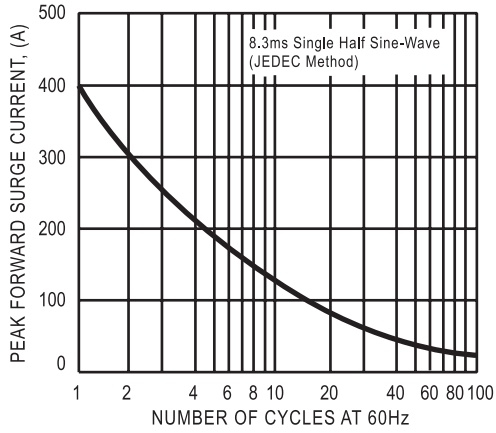## FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

8.3ms Single Half Sine-Wave (JEDEC Method)

PEAK FORWARD SURGE CURRENT, (A)

NUMBER OF CYCLES AT 60Hz

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

Single Phase Half Wave 60Hz Indutive or Resistive Load

AVERAGE FORWARD CURRENT, (A)

CASE TEMPERATURE, (℃)
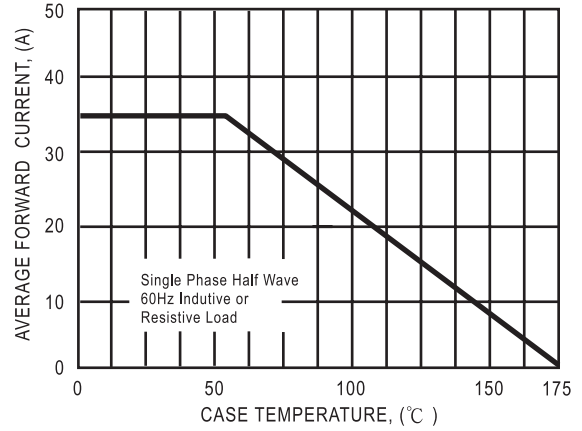
FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

T_J = 25℃
Pulse Width = 300us
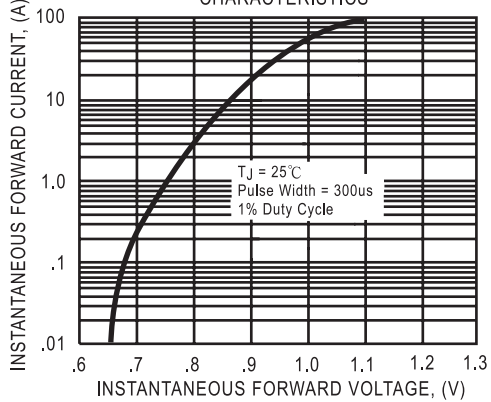1% Duty Cycle

INSTANTANEOUS FORWARD CURRENT, (A)

INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

T_J = 25℃

INSTANTANEOUS REVERSE CURRENT, (uA)

PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)