



MB15(W) / 25(W) / 35(W)

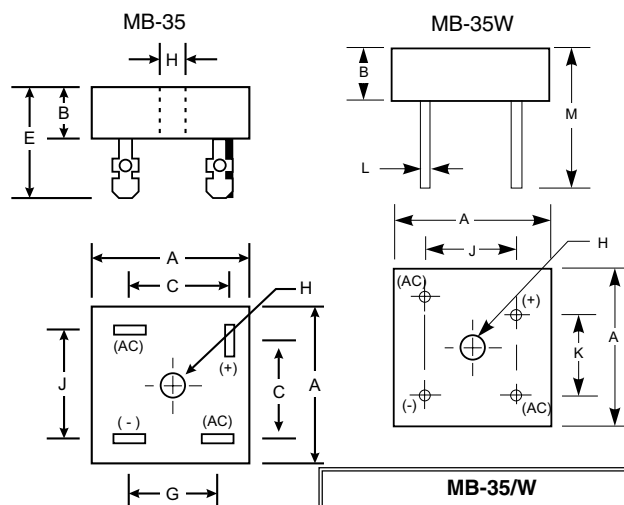
HIGH CURRENT SILICON BRIDGE RECTIFIER

Features

- High Conductivity
- Metal Case
- Superior Thermal Design
- Surge Ratings to 400A
- Terminals Solderable per MIL-STD-202, Method 208
- Universal Terminals; Snap-on, Solder or P.C. Board Mounting

Mechanical Data

- Terminals: 0.25" Faston Terminals
- Case material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Approx Weight: 29 grams
- Mounting Position: Bolt Down on Heat-sink with Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency
- Mounting Torque: 20 in. lb. Max.
- Polarity: Polarity Symbols Marked on Case



MB-35/W		
Dim	Min	Max
A	28.4	28.7
B	10.97	11.23
C	15.5	17.6
E	—	25.4
G	13.3	15.3
H	4.9 $\varnothing$ Nominal	
J	18.6	19.6
All Dimensions in mm		

Suffix "W" denotes wire leads

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	-05	-1	-2	-4	-6	-8	-10	Units
Maximum Recurrent 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 Rectified Output Current @ $T_C = 55^\circ\text{C}$	MB15 MB25 MB35 $I_{(AV)}$	15.0 25.0 35.0							A
Peak Forward Surge Current Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	MB15 MB25 MB35 I_{FSM}	300 300 400							A
Maximum Instantaneous @ 7.5A Forward Voltage Drop per @ 12.5A Rated Load (JEDEC Method) @ 17.5A	MB15 MB25 MB35 V_F	1.1 1.1 1.2							V
Maximum Reverse DC current at Rated DC Blocking Voltage (per Element) @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_R	10 1.0							μA mA
I^2t rating for fusing (8.3ms)	MB15 MB25 MB35 I^2t	373 373 664							A^2s
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes: 1. Thermal Resistance from junction to case

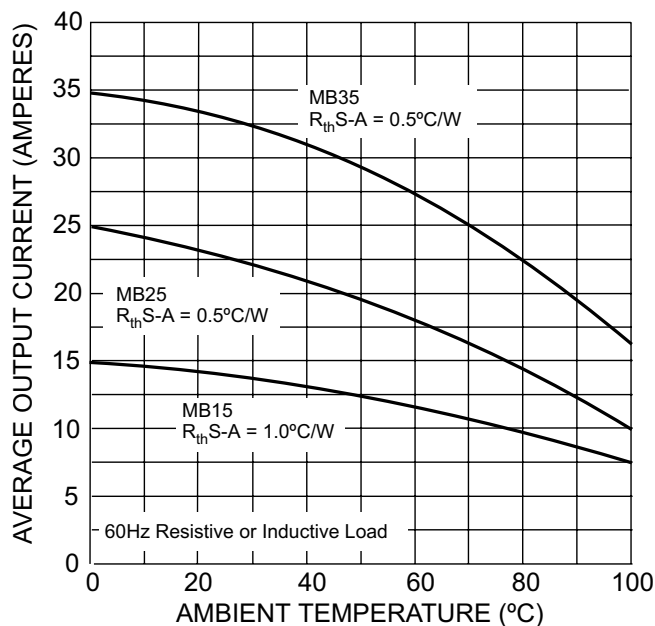


Fig. 1 Maximum Output Rectified Current

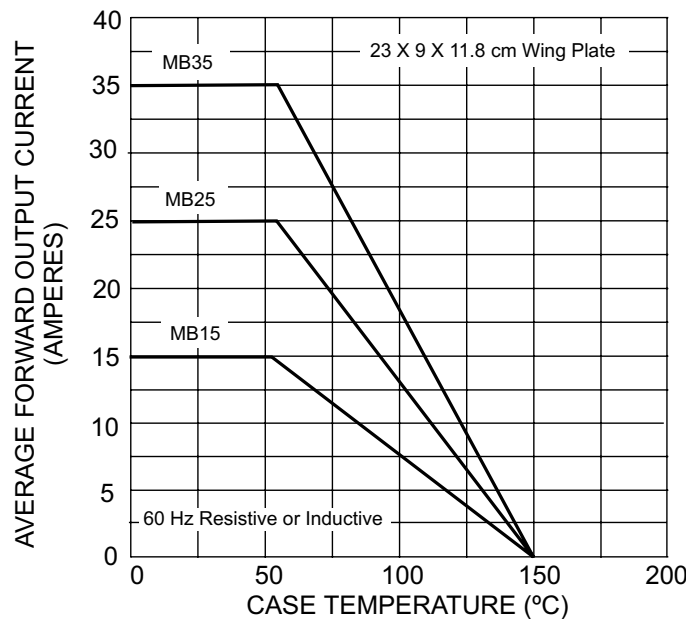


Fig. 2 Maximum Output Rectified Current

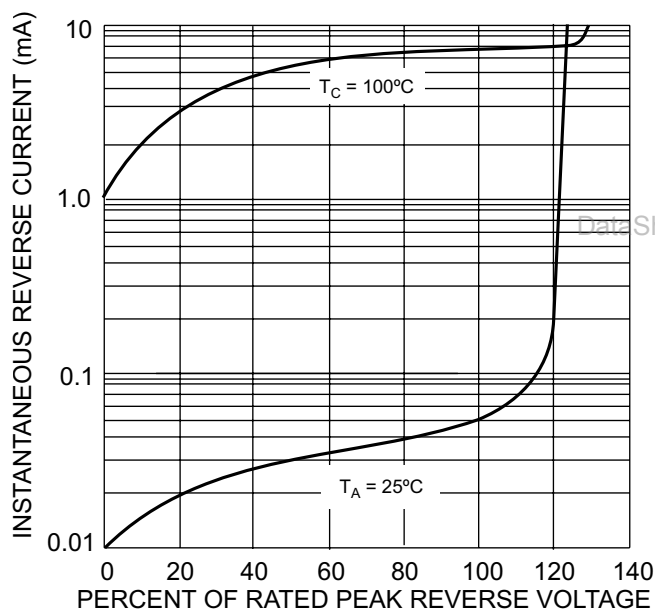


Fig. 3 Typical Reverse Characteristics

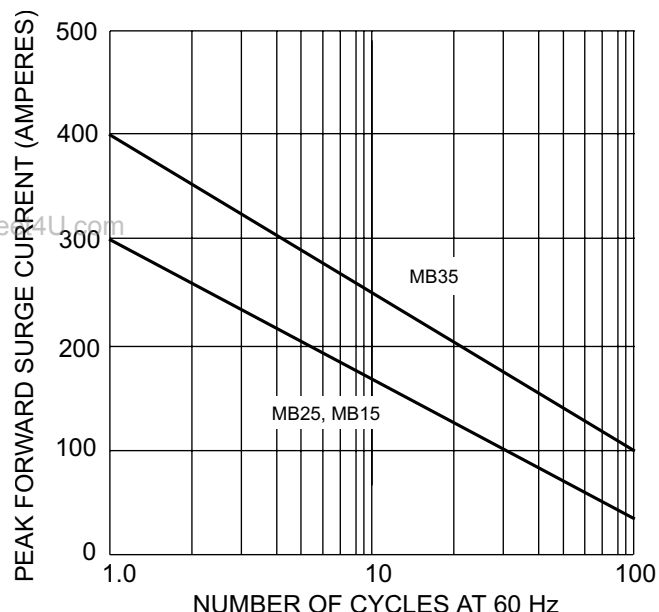


Fig. 4 Maximum Non-Repetitive Peak Forward Surge current

NOT RECOMMENDED FOR NEW DESIGNS,
USE GBPC15/W, GBPC25/W, OR GBPC35/W