New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

High Current Bridge Rectifier

MB Series

Reverse Voltage: 50 - 1000 Volts
Forward Current: 10/15/25/35/50 Amp

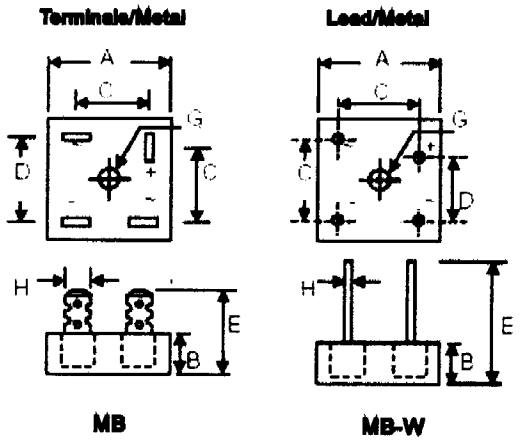
Features

- Surge overload 200 - 400 Amp peak
- Low forward voltage dro
- Mounting position: Any
- Electrically isolated base - 1800 Volts
- Solderable 0.25" FASTON terminals
- Materials used carries U/L recognition

Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Mounting: Through Hole for #10 Screw
- Weight: 30 grams (approx.)

- "W" Suffix Designates Wire Leads
- No Suffix Designates Faston Terminals



	TERMINALS		LEAD	
Dim	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	10.97	11.23	10.97	11.23
C	15.70	16.70	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	-
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

Maximum Ratings and Electrical Characterics

Rating at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load 60Hz.
For capacitive load current by 20%

CHARACTERISTICS	MB 1005 / 1505 / 2505 / 3505 / 5005	MB 101 / 151 / 251 / 351 / 501	MB 102 / 152 / 252 / 352 / 502	MB 104 / 154 / 254 / 354 / 504	MB 106 / 156 / 256 / 356 / 506	MB 108 / 158 / 258 / 358 / 508	MB 1010 / 1510 / 2510 / 3510 / 5010	UNIT
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
Maximum Forward Voltage Drop per element at 5.0/7.5/12.5/17.5/25.0A Peak	1.2							V
Maximum Reverse Current at Rate DC Blocking Voltage per element @ T_A = 25°C	10							uA
Operating Temperature Range T_C	-55 to +125							°C
Storage Temperature Range T_A	-55 to +150							°C

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

High Current Bridge Rectifier

Maximum Ratings and Electrical Characterics

CHARACTERISTICS	MB1005 - 1010	MB1505 - 1510	MB2505 - 2510	MB3505 - 3510	MB5005 - 5010	UNIT
Maximum Average Forward Rectified Output Current @ T_C = 55°C	10	15	25	35	50	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	200	300	300	400	400	A

NOTES: Also available on MB 10W/15W/25W/35W/50W series.

Rating and Characteristic Curves (MB10, 15, 25, 35, 50)

Fig. 1 - Reverse Characteristics

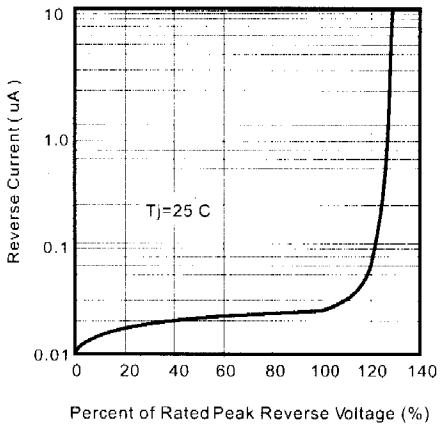


Fig. 2 - Forward Characteristics

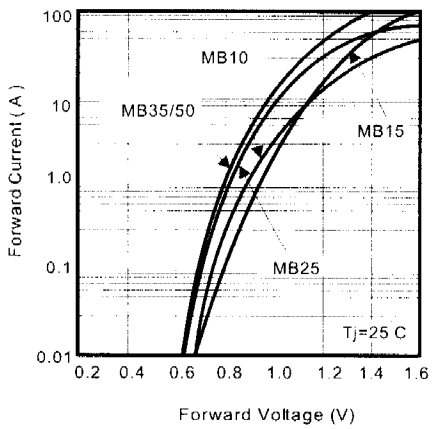


Fig. 3 - Non Repetitive Forward Surge Current

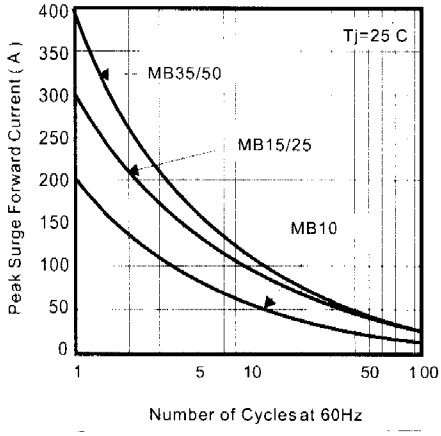


Fig. 4 - Current Derating Curve

