

MBF		
Dim	Min	Max
A	4.6	5
B	3.6	4.0
C	1.2	1.6
D	6.5	7.0
E	0.15	0.35
F	0.7	1.1
I	0.5	0.8
K	2.3	2.7

All Dimensions in mm

## FEATURES

- Glass: passivated chip junctions
- High surge overload rating: 30A peak
- Saves space on printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension

## MECHANICAL DATA

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026

## Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T <sub>A</sub> =25°C	I <sub>F(AV)</sub>				0.8 1.0				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I <sub>FSM</sub>				30				A
Current squared time t < 8.3ms , Ta = 25°C	I <sup>2</sup> t				3.7				A <sup>2</sup> s

## Thermal Characteristics

Characteristic	Symbol	MB4F	MB6F	MB8F	MB10F	UNITS
Typical junction capacitance per leg (NOTE 1)	C <sub>J</sub>		8			p F
Typical thermal resistance per leg (Note 2)	R <sub>θJA</sub> R <sub>θJC</sub> R <sub>θJL</sub>		67 24 13			°C/W
Operating junction temperature range	T <sub>J</sub>		- 55 ---- + 150			°C
Storage temperature range	T <sub>STG</sub>		- 55 ---- + 150			°C

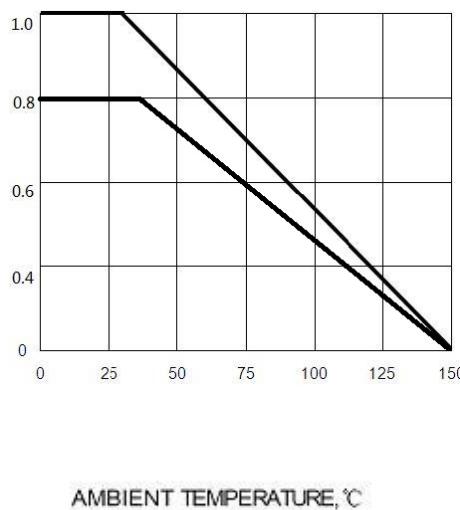
Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Device mounted on PCB with 10 mm x 20 mm x 0.1mm copper pad areas

## Electrical Characteristics (@TA = 25°C unless otherwise specified)

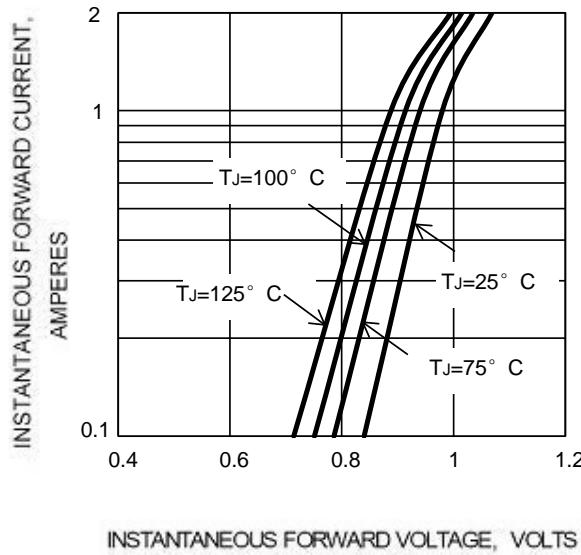
Characteristic	Symbol	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum instantaneous forward voltage at 0.4 A	V <sub>F</sub>		1.0			V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>		5.0 0.1			μ A m A

AVERAGE FORWARD CURRENT, AMPERES



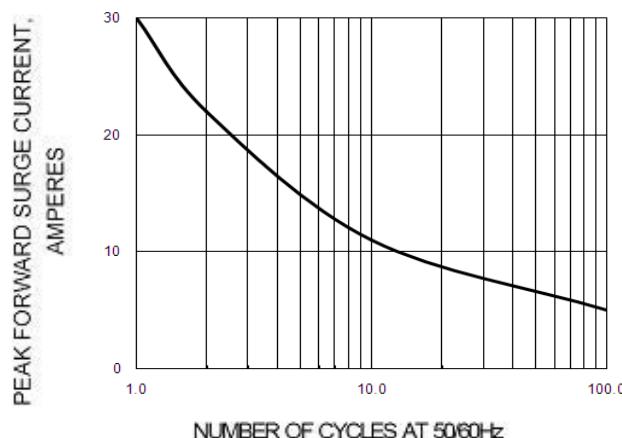
AMBIENT TEMPERATURE, °C

**FIG.3 – TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG**



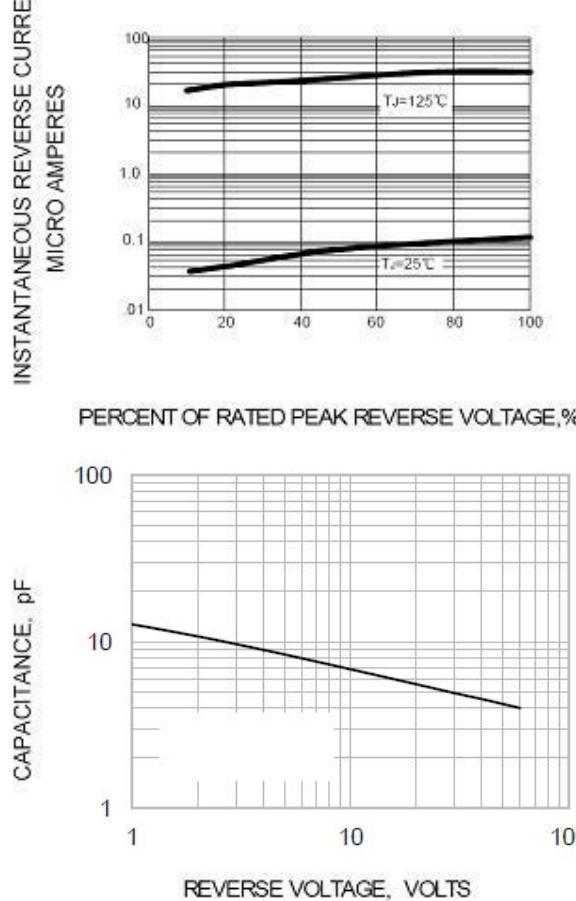
INSTANTANEOUS FORWARD VOLTAGE, VOLTS

**FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



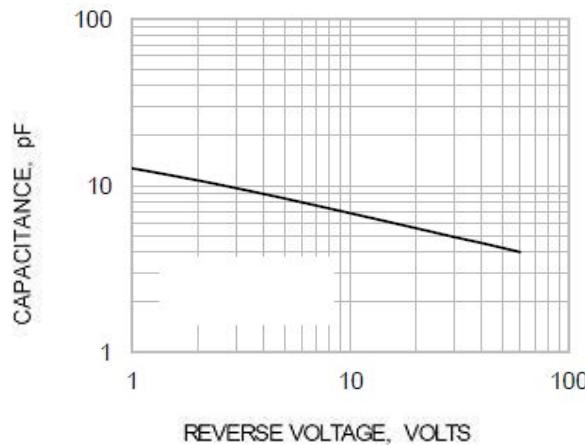
NUMBER OF CYCLES AT 50/60Hz

**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**



INSTANTANEOUS REVERSE CURRENT, MICRO AMPERES

PERCENT OF RATED PEAK REVERSE VOLTAGE, %



REVERSE VOLTAGE, VOLTS

Device	Package	Shipping
MB4F--MB10F	MBF	5000/Tape&Reel

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bridge Rectifiers](#) category:*

*Click to view products by [LGE manufacturer](#):*

Other Similar products are found below :

[G3SBA60-E351](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#) [GBU6B-E3/45](#) [GSIB680-E3/45](#) [DB101-BP](#) [DF10SA-E345](#) [RMB2S RCG](#) [APT30DF100HJ](#) [APT60DF20HJ](#) [B2S-E3/80](#) [BU1506-E351](#) [BU15085S-E345](#) [BU1508-E3/45](#) [BU1510-E3/45](#) [RS404GL-BP](#) [RS405GL-BP](#) [G3SBA20-E3/51](#) [G5SBA20-E3/51](#) [G5SBA60-E3/51](#) [GBJ1502-BP](#) [GBL02-E351](#) [GBL10-E3/45](#) [GBU10J-BP](#) [GBU4J-BP](#) [GBU4K-BP](#) [GBU8B-E3/45](#) [GBU8D-BP](#) [GBU8J-BP](#) [GSIB1520-E3/45](#) [MB1510](#) [MB352W](#) [MB6M-G](#) [B2M-E345](#) [B40C7000A](#) [B500C7000A](#) [MP5010W-BP](#) [MP501W-BP](#) [MP502-BP](#) [BR1005-BP](#) [BR101-BP](#) [BU1006-E345](#) [BU12065S-E3/45](#) [BU1508-E3/51](#) [BU2006-E3/45](#) [BU2008-E345](#)