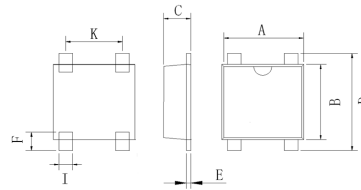


FEATURES

- 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



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		

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	MB4F	MB6F	MB8F	MB10F	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	280	420	560	700	V
DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum average forward Output current @TA=25°C	$I_{F(AV)}$	0.8 ⁽¹⁾ 1.0 ⁽²⁾				A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30				A
Current squared time $t < 8.3ms$, Ta = 25°C	I^2t	3.7				A ² s

Note:

1. Device mounted on glass epoxy PCB with 1.3 mm x1.3mm pads;
2. Device mounted on aluminum substrate PCB with an area of 20mm x20mm pads;

Thermal Characteristics

Characteristic	Symbol	MB4F	MB6F	MB8F	MB10F	UNITS
Typical junction capacitance per leg (NOTE 1)	C_J	8				p F
Typical thermal resistance per leg (Note 2))	$R_{\theta JA}$	67				°C/W
	$R_{\theta JC}$	24				
	$R_{\theta JL}$	13				
Operating junction temperature range	T_J	- 55 ---- + 150				°C
Storage temperature range	T_{STG}	- 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_F	1.0				V
Maximum reverse current @TA=25°C at rated DC blocking voltage @TA=100°C	I_R	5.0				μ A
		0.1				m A



FIG.1 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

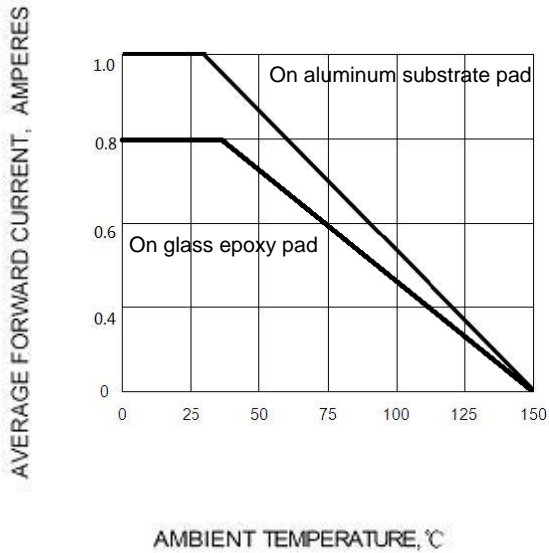


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

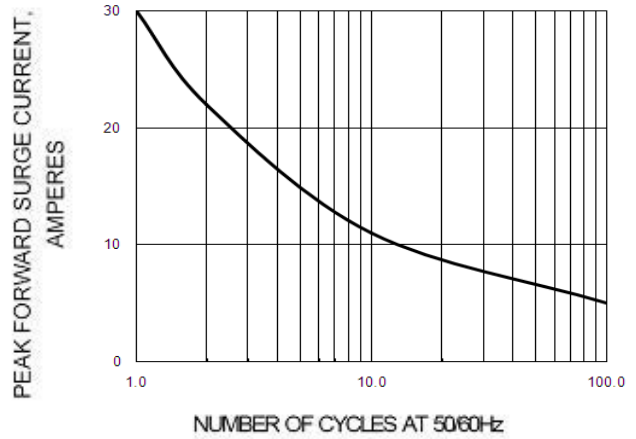


FIG.3 – TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

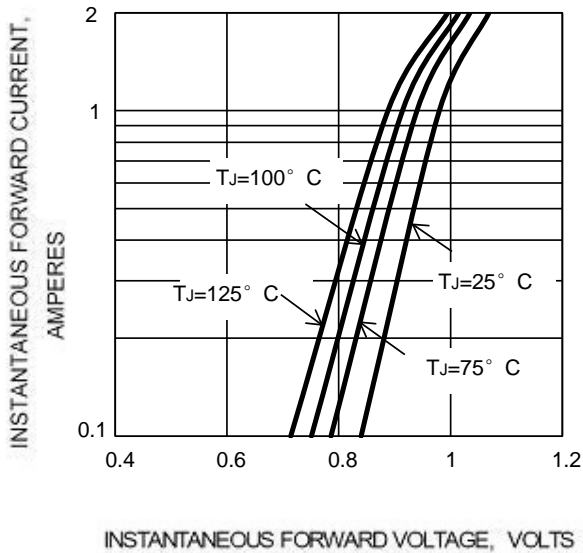
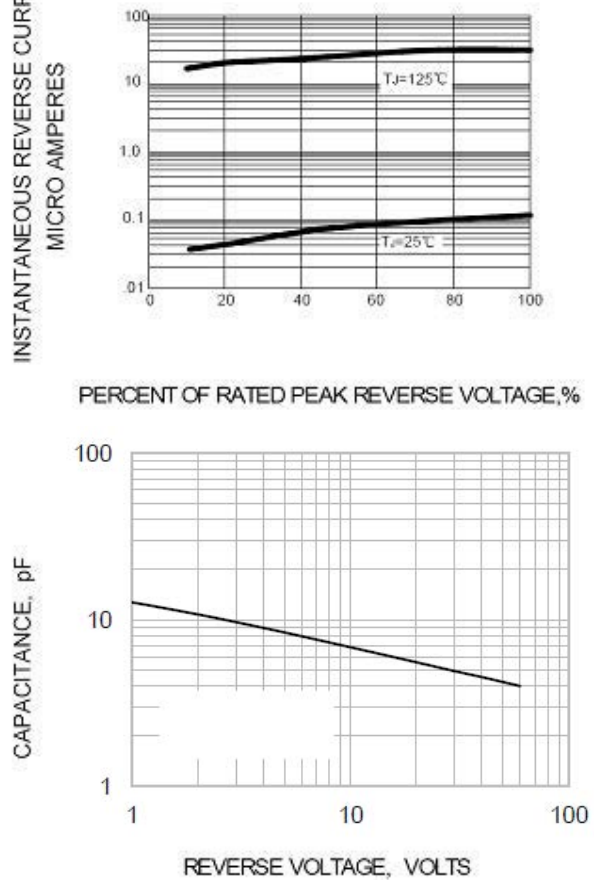


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



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