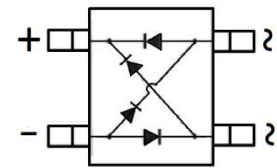


**BRIDGE RECTIFIER**
**FEATURES**

- Low Reverse voltage leakage current
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High forward surge current capability
- Small Surface Mount device


**MB-F**
**MECHANICAL DATA**

- Case: MB-F
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.13 grams (approximate)


**MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	1000	V
DC Reverse Voltage	V <sub>R</sub>	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	700	V
Mean rectifying current	I <sub>F</sub>	0.8	A
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I <sub>FSM</sub>	25	A
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	60	°C/W
Junction Temperature	T <sub>J</sub>	-55 ~+150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>		1.1	V	I <sub>F</sub> =0.8A
Reverse current T=25°C	I <sub>R</sub>		5	uA	V <sub>R</sub> =1000V
Reverse current T=125°C	I <sub>R</sub>		500	uA	V <sub>R</sub> =1000V
Junction capacitance	C <sub>J</sub>		13	pF	V=4V <sub>DC</sub> ,f=1MH

**BRIDGE RECTIFIER**

**Typical Characteristics**

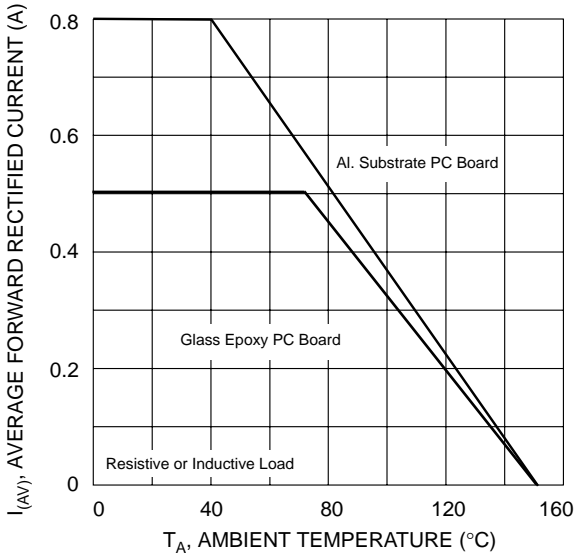


Fig. 1 Output Current Derating Curve

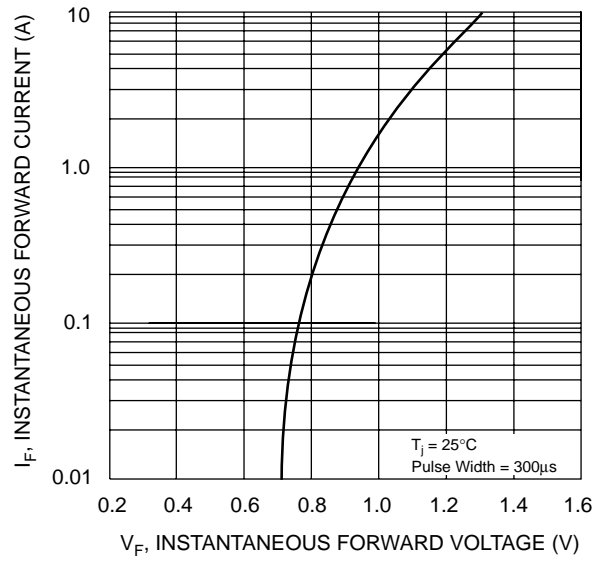


Fig. 2 Typical Forward Characteristics (per leg)

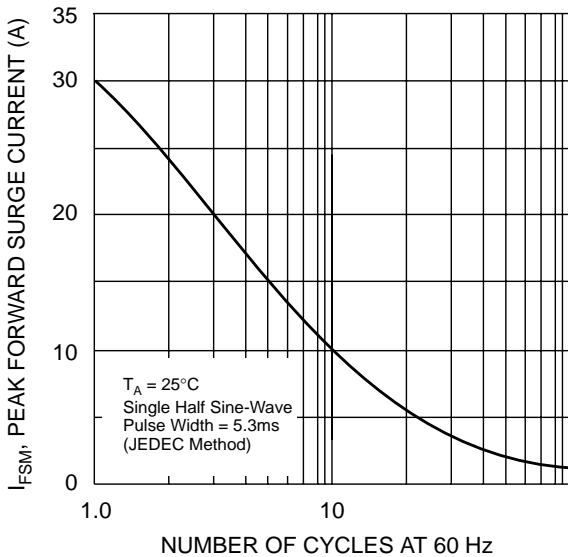


Fig. 3 Maximum Peak Forward Surge Current (per leg)

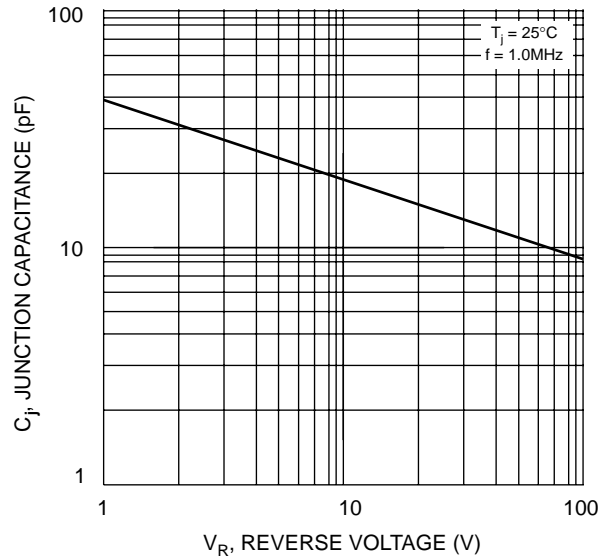


Fig. 4 Typical Junction Capacitance

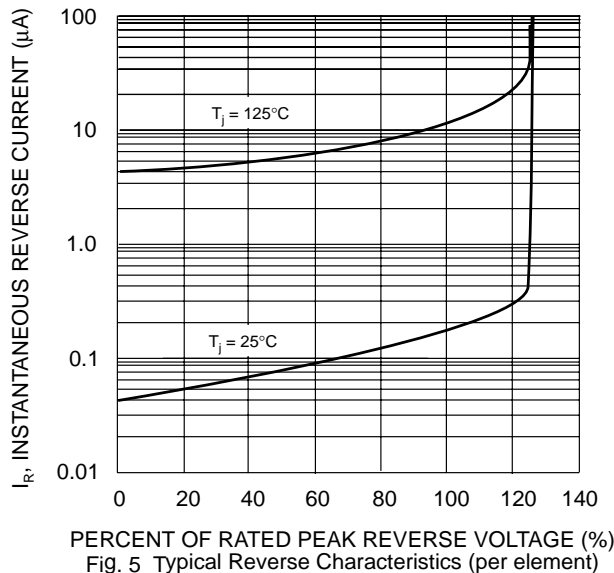
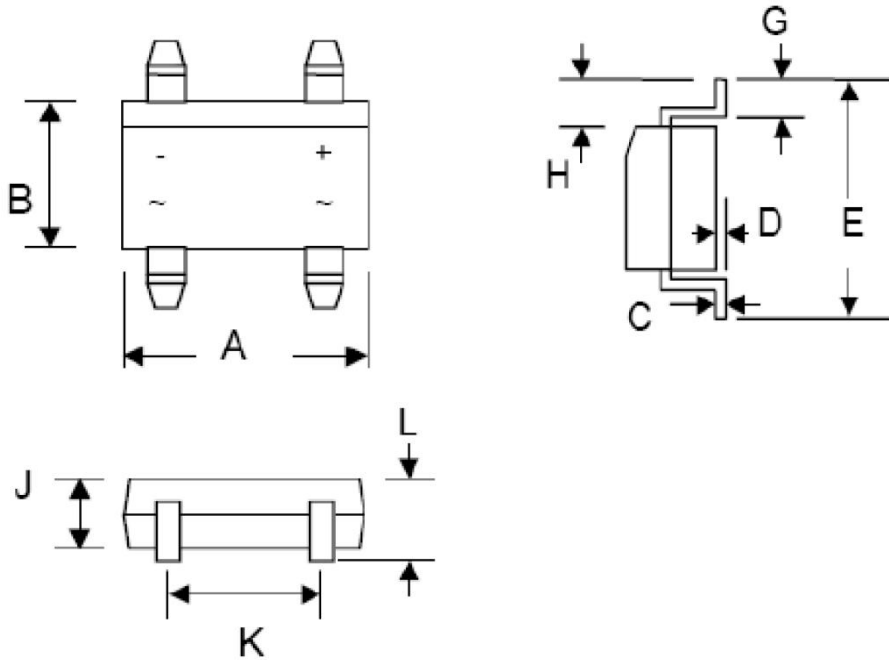
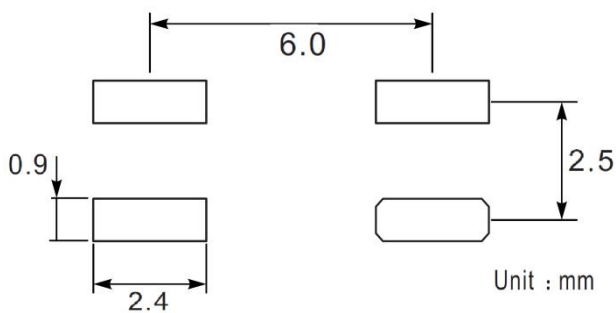


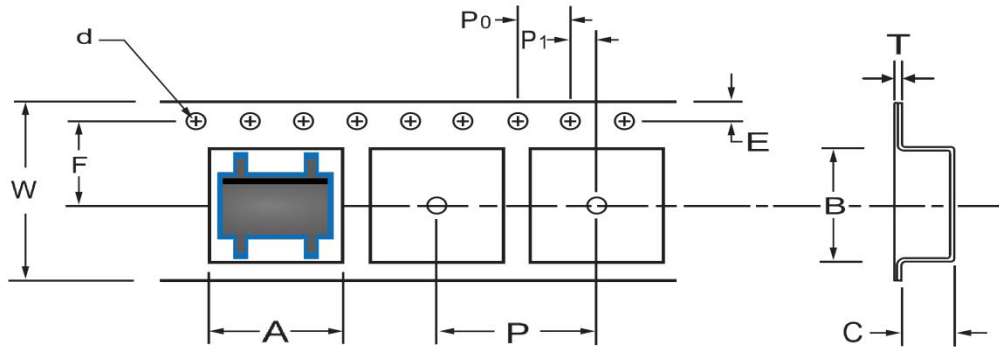
Fig. 5 Typical Reverse Characteristics (per element)

**BRIDGE RECTIFIER**
**MB-F Package Outline Dimensions**


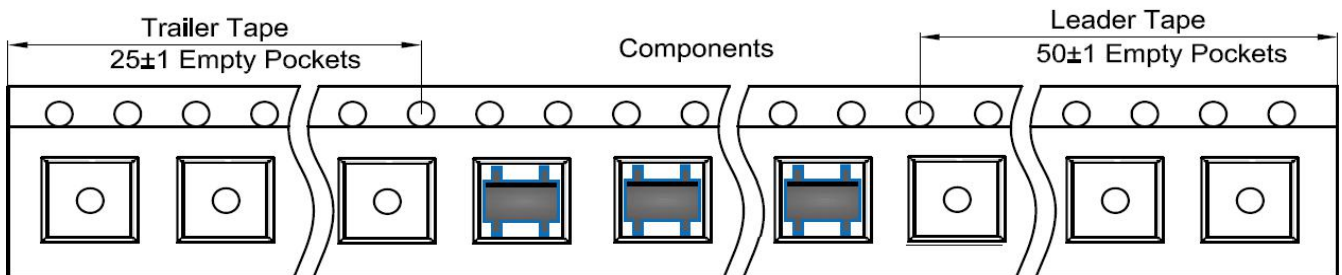
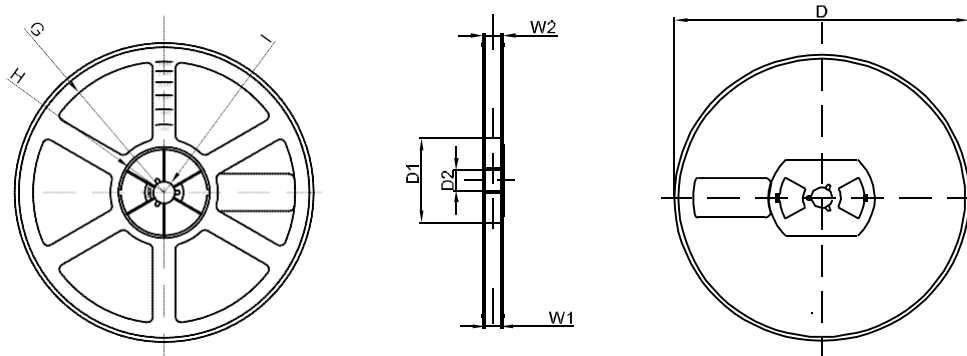
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.95	0.177	0.195
B	3.60	4.10	0.142	0.161
C	0.15	0.35	0.006	0.014
D	-----	0.20	—	0.008
E	6.40	7.00	0.252	0.276
G	0.50	1.10	0.020	0.043
H	1.30	1.70	0.051	0.067
J	1.20	1.60	0.047	0.063
K	2.30	2.70	0.091	0.106
L	—	1.80	—	0.071

**MB-F Suggested Pad Layout**

**Note:**

1. Controlling dimension: in millimeters
2. General tolerance:  $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

**BRIDGE RECTIFIER**
**MB-F Tape and Reel**
**MB-F Embossed Carrier Tape**


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
MB-F	5.00	7.24	1.95	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**MB-F Tape Leader and Trailer**

**MB-F Reel**


DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
13" DIA	Ø330	75.0	13.00	R165	R37.50	R6.50	12.40	17.60
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1