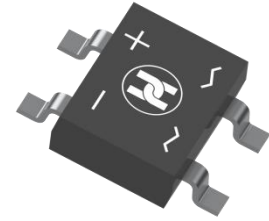
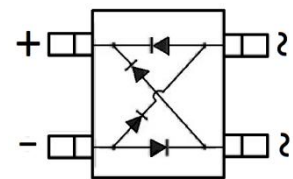


BRIDGE RECTIFIER
FEATURES

- 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
- Weight: 0.13 grams (approximate)

MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbol	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
DC Reverse Voltage	V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Mean rectifying current	I _F	1.0							A
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I _{FSM}	35							A
Thermal Resistance From Junction To Ambient	R _{θJA}	60							°C/W
Junction Temperature	T _J	-55 ~+150							°C
Storage Temperature	T _{STG}	-55 ~+150							°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V _F		1.1	V	I _F =1.0A
Reverse current T=25°C	I _R		5	uA	V _R =V _{RRM}
Reverse current T=125°C	I _R		500	uA	V _R =V _{RRM}
Junction capacitance	C _J		13	pF	V=4V _{DC} ,f=1MH

BRIDGE RECTIFIER

Typical Characteristics

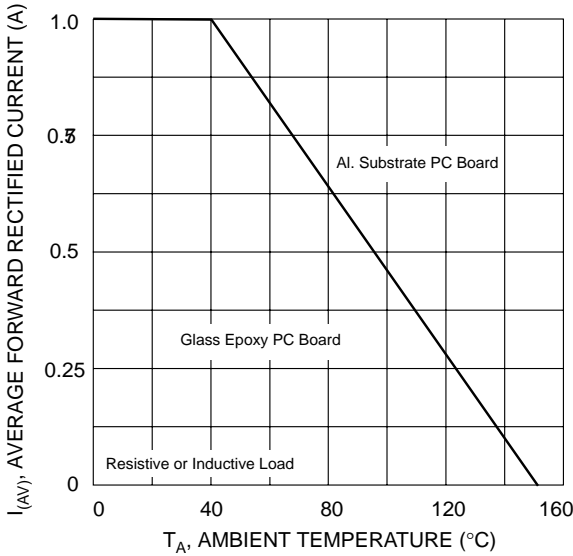


Fig. 1 Output Current Derating Curve

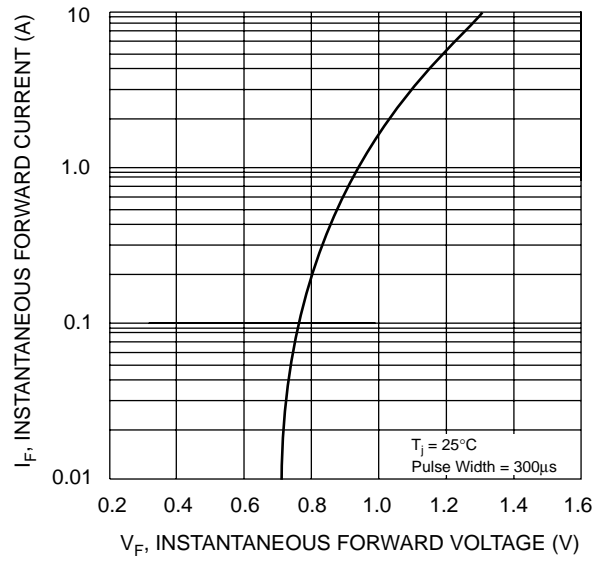


Fig. 2 Typical Forward Characteristics (per leg)

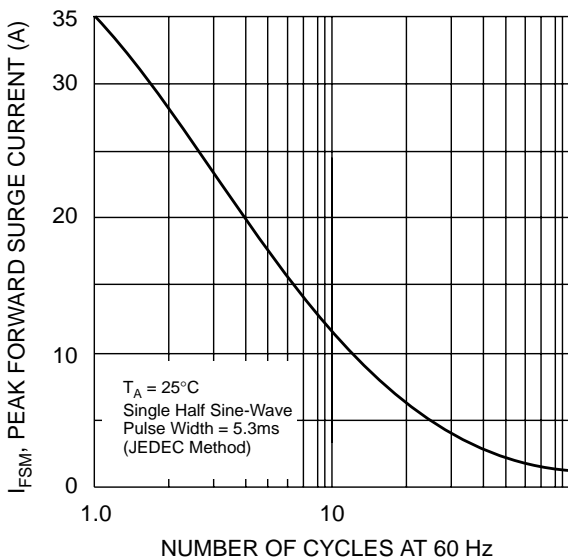


Fig. 3 Maximum Peak Forward Surge Current (per leg)

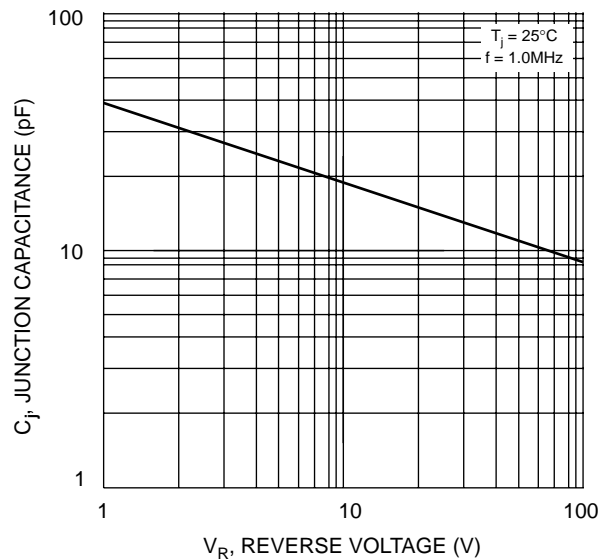


Fig. 4 Typical Junction Capacitance

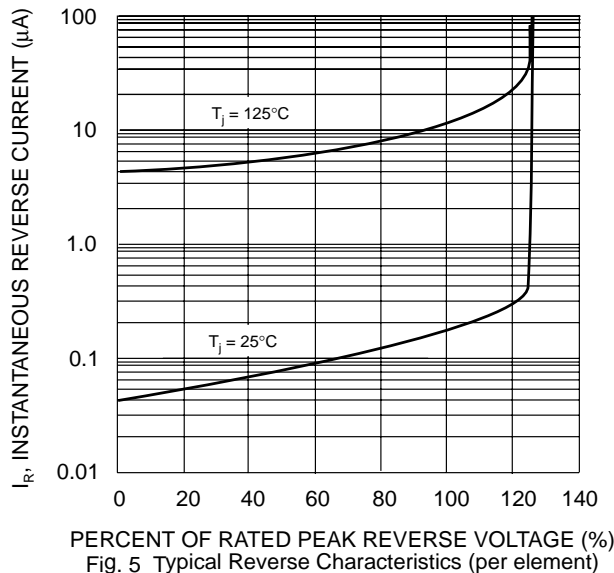
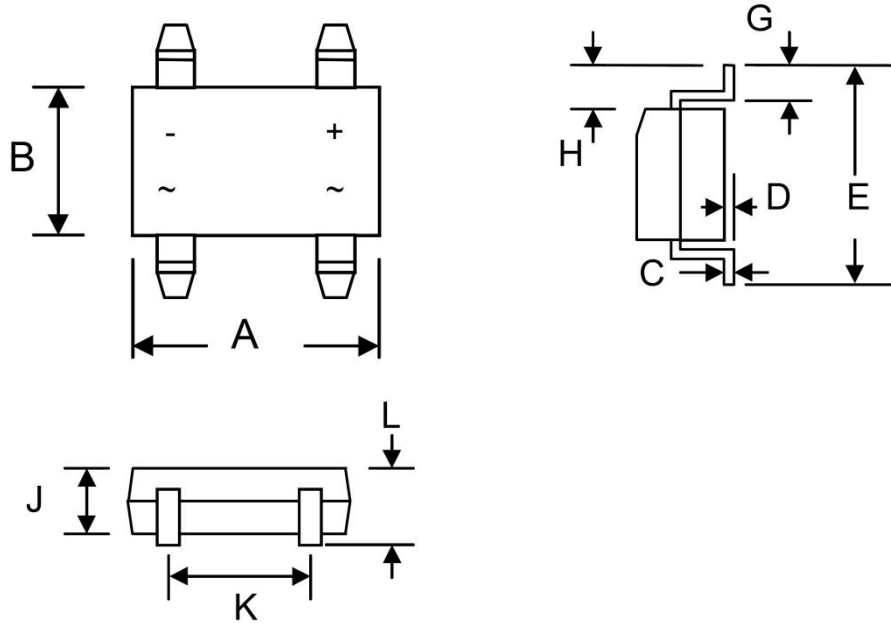
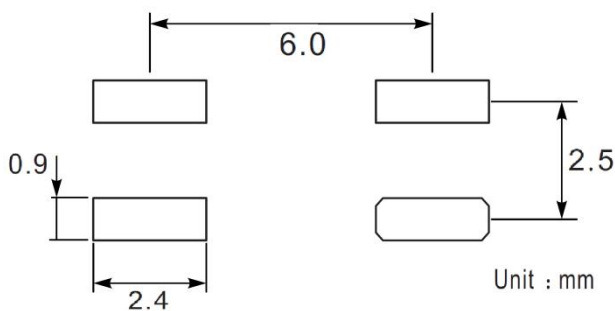


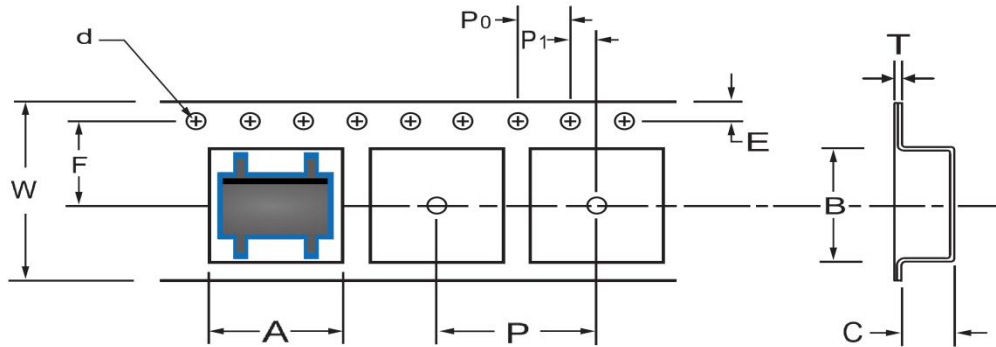
Fig. 5 Typical Reverse Characteristics (per element)

BRIDGE RECTIFIER
MB-F Package Outline Dimensions


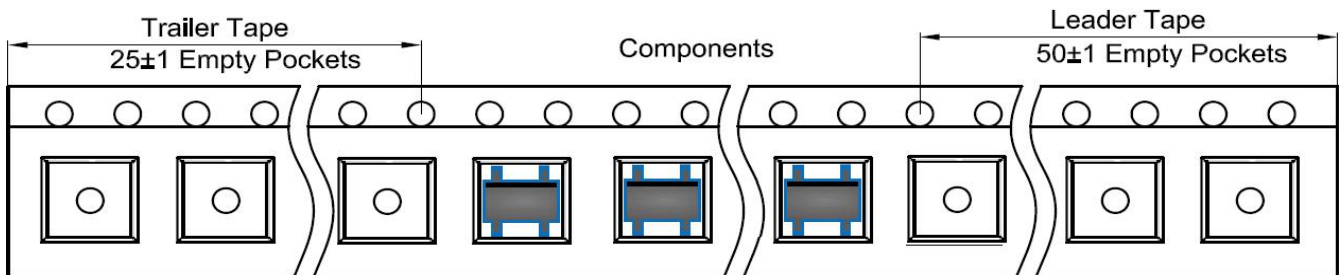
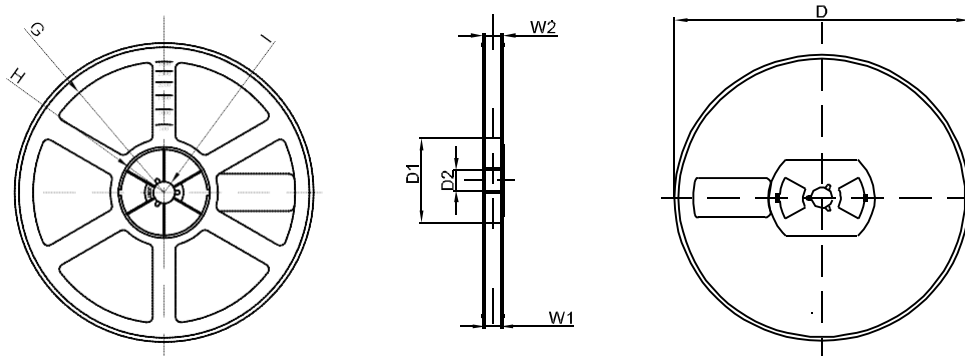
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.95	0.177	0.195
B	3.60	4.10	0.142	0.161
C	0.15	0.35	0.006	0.014
D	-----	0.20	—	0.008
E	6.40	7.00	0.252	0.276
G	0.50	1.10	0.020	0.043
H	1.30	1.70	0.051	0.067
J	1.20	1.60	0.047	0.063
K	2.30	2.70	0.091	0.106
L	—	1.80	—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