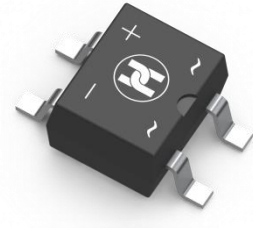
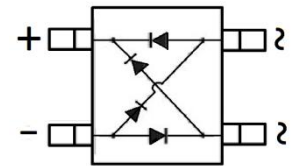


BRIDGE RECTIFIER
FEATURES

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


MB-S
MECHANICAL DATA

- Case: MB-S
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.22 grams (approximate)
- Marking: MB05S-MB10S


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

Parameter	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	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}	30								A
Thermal Resistance From Junction To Ambient	R _{θJA}	90								°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 =1000V
Reverse current T=125°C	I _R		40	uA	V _R =1000V
Junction capacitance	C _J		15	pF	V=4V _{DC} , f=1MH

BRIDGE RECTIFIER

Typical Characteristics

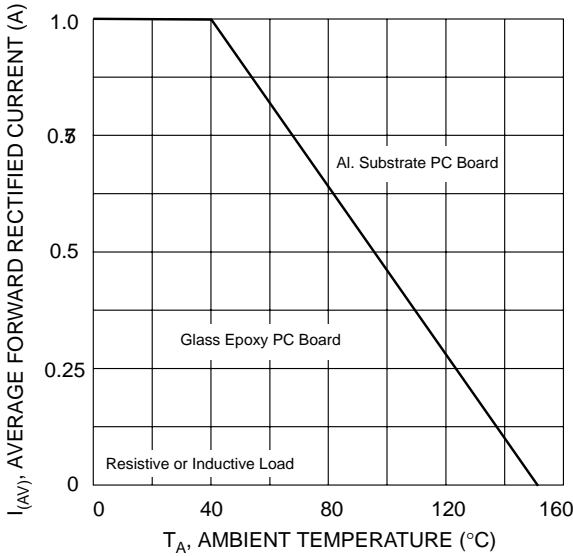


Fig. 1 Output Current Derating Curve

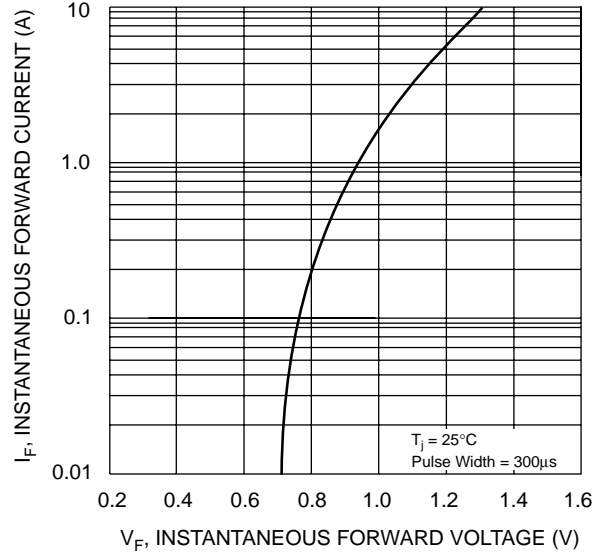


Fig. 2 Typical Forward Characteristics (per leg)

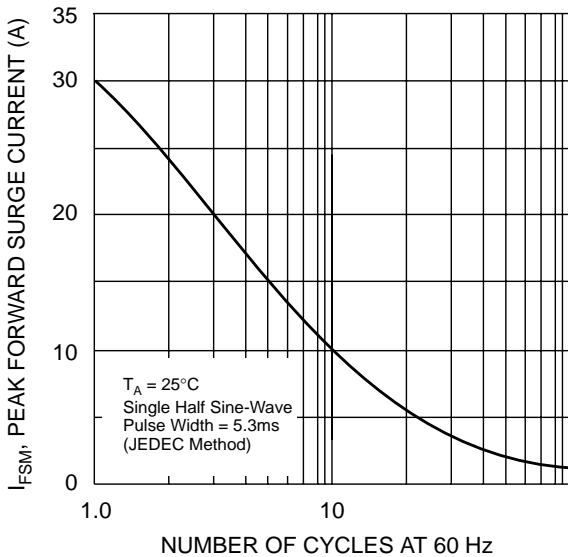


Fig. 3 Maximum Peak Forward Surge Current (per leg)

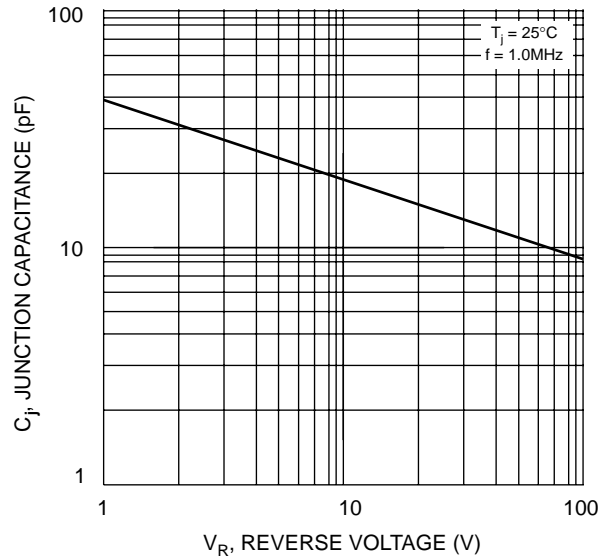


Fig. 4 Typical Junction Capacitance

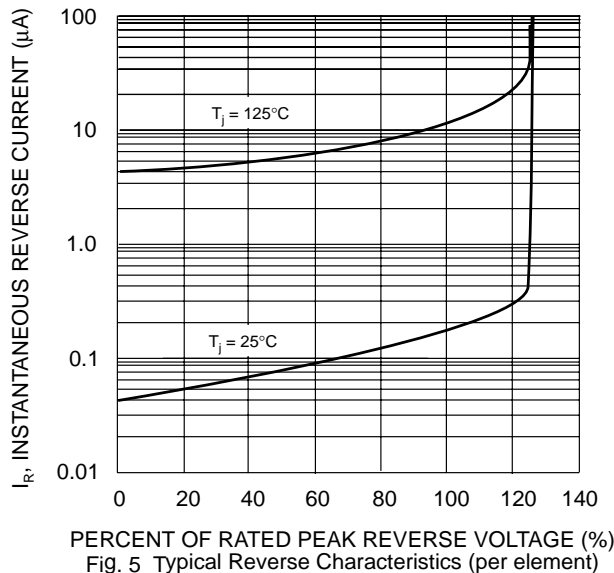
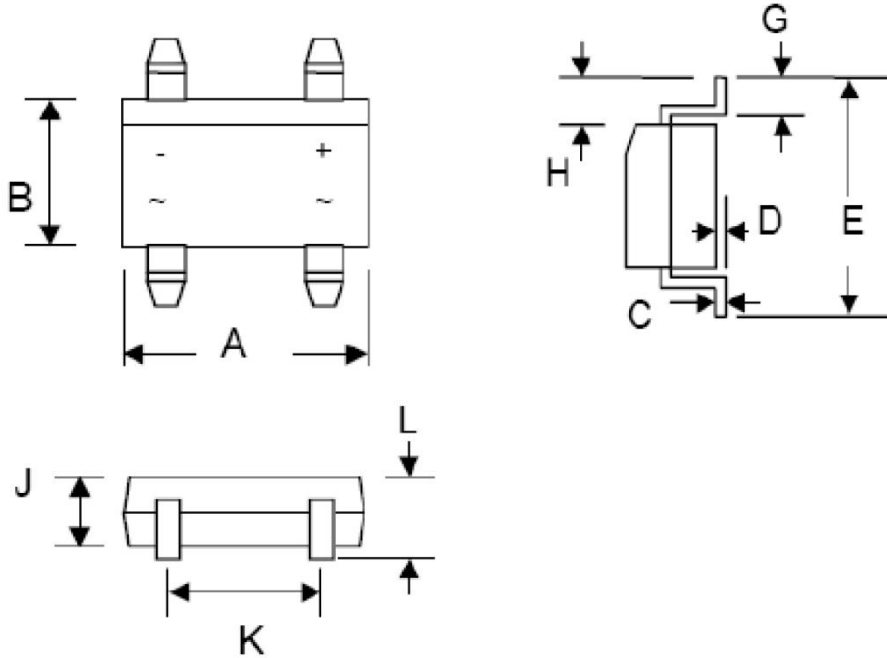
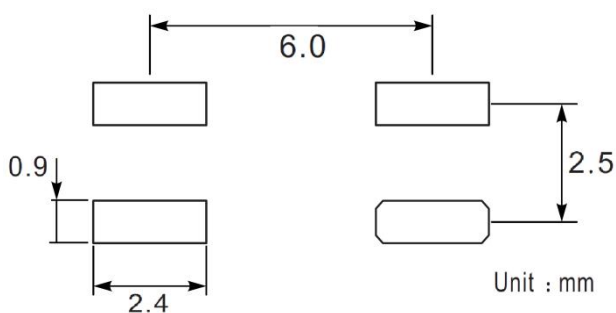


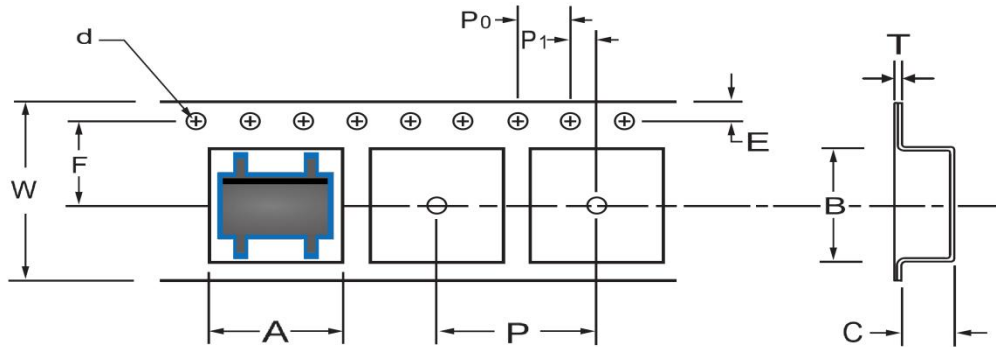
Fig. 5 Typical Reverse Characteristics (per element)

BRIDGE RECTIFIER
MB-S Package Outline Dimensions


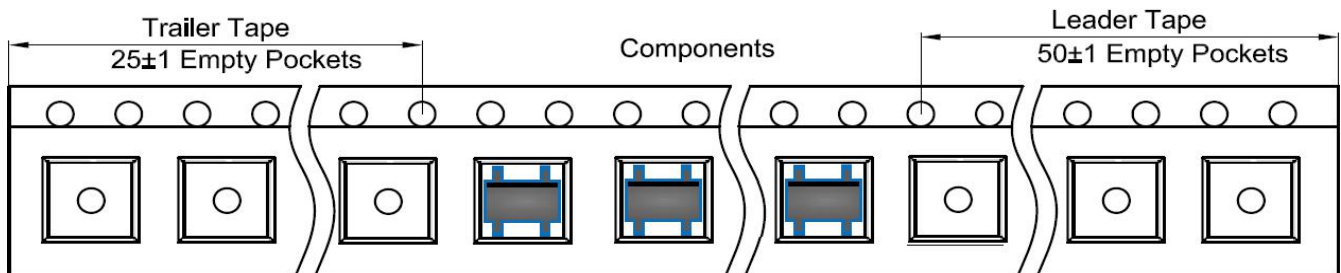
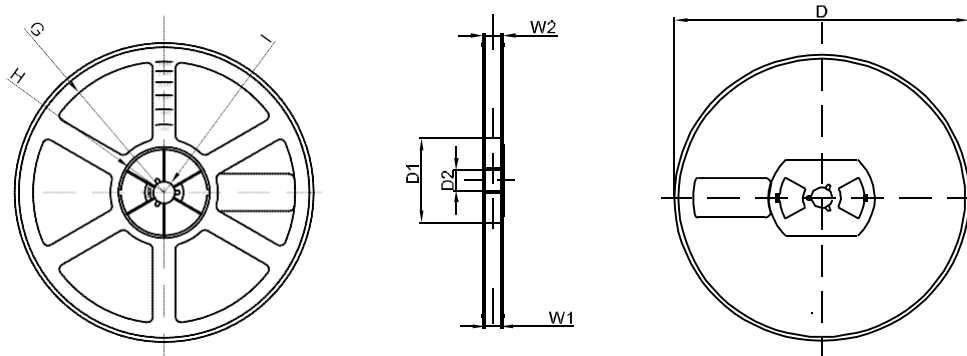
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
B	3.80	4.20	0.150	0.165
C	0.15	0.35	0.006	0.014
D	-----	0.20	—	0.008
E	-----	7.00	—	0.276
G	0.70	1.10	0.028	0.043
H	1.30	1.70	0.051	0.067
J	2.30	2.70	0.091	0.106
K	2.30	2.70	0.091	0.106
L	—	3.00	—	0.118

MB-S 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-S Tape and Reel
MB-S Embossed Carrier Tape


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
MB-S	5.00	7.24	3.33	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-S Tape Leader and Trailer

MB-S 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