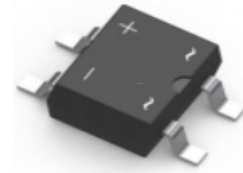
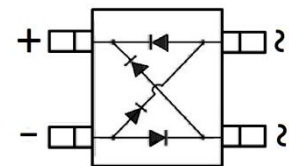


**BRIDGE RECTIFIER**
**FEATURES**

- 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)


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

Parameter	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
DC Reverse Voltage	V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Mean rectifying current	I <sub>F</sub>	0.5/0.8							A
Non-Repetitive Peak Forward Surge Current @ t = 8.3 ms	I <sub>FSM</sub>	30							A
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	90							°C/W
Junction Temperature	T <sub>J</sub>	-55 ~ +150							°C
Storage Temperature	T <sub>STG</sub>	-55 ~ +150							°C

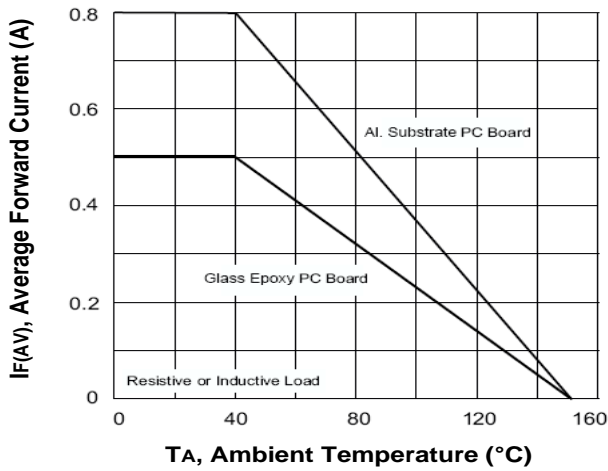
**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

Parameter	Symbol	Min	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>		1.0	V	I <sub>F</sub> =0.5A
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> =V <sub>RRM</sub>
Reverse current T=125°C	I <sub>R</sub>		40	uA	V <sub>R</sub> =V <sub>RRM</sub>
Junction capacitance	C <sub>J</sub>		13	pF	V=4V <sub>DC</sub> , f=1MH

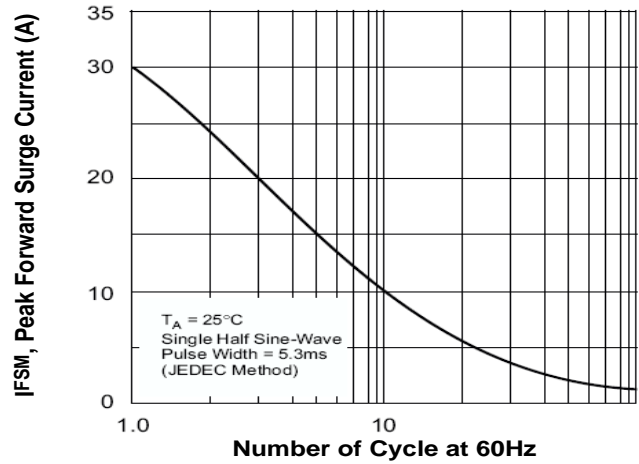
**BRIDGE RECTIFIER**

**Typical Characteristics**

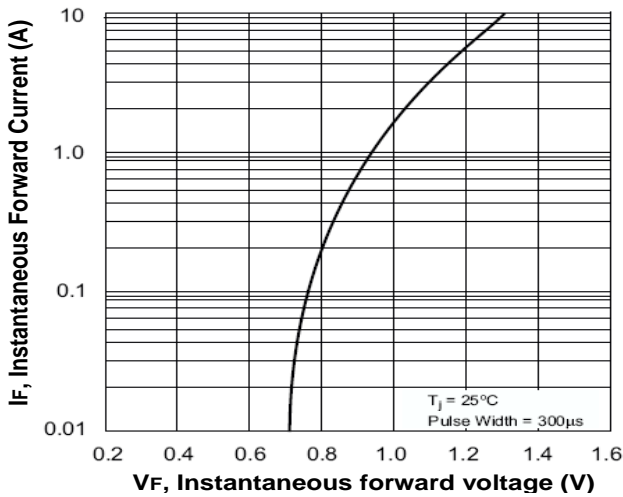
**Fig.1- Output Current Derating Curve**



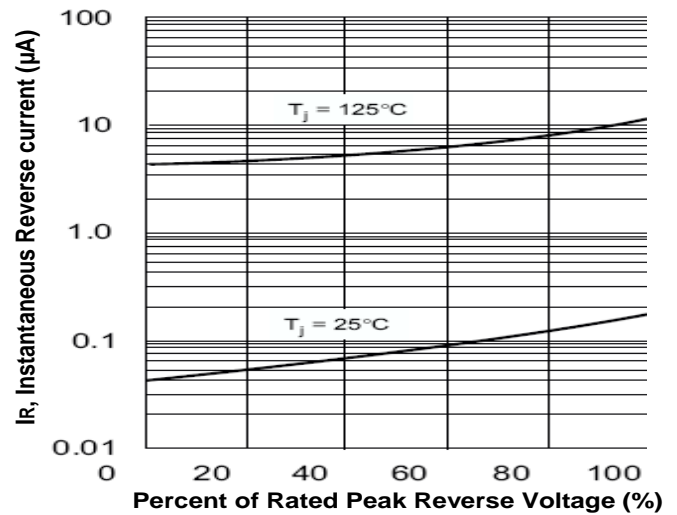
**Fig.2-Max. Non-repetitive Peak Forward Surge Current per leg**



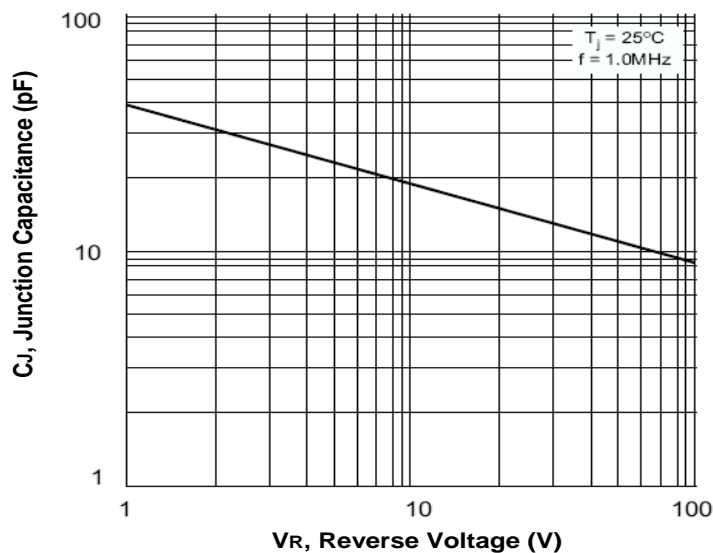
**Fig.3-Typical Instantaneous Forward Characteristic per leg**



**Fig.4-Typical Reverse Characteristics per leg**

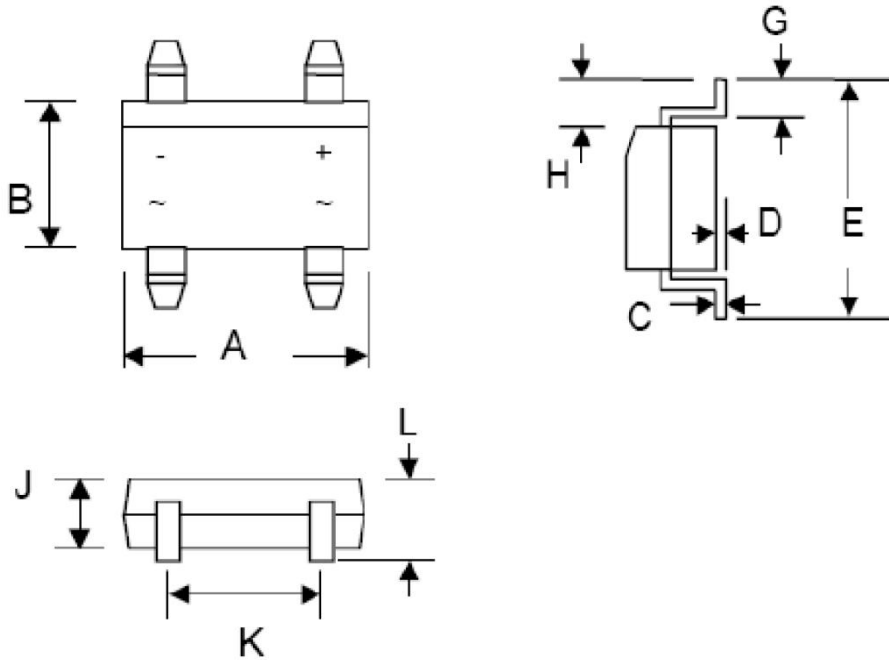


**Fig.5-Typical Junction Capacitance**



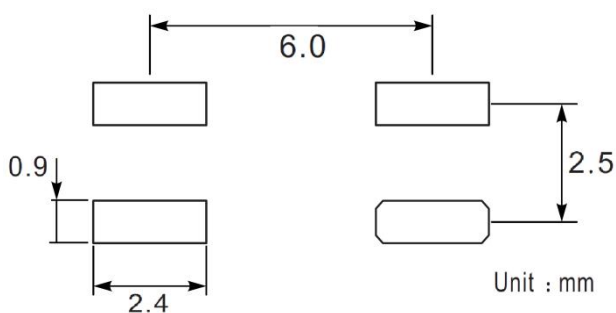
BRIDGE RECTIFIER

**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**



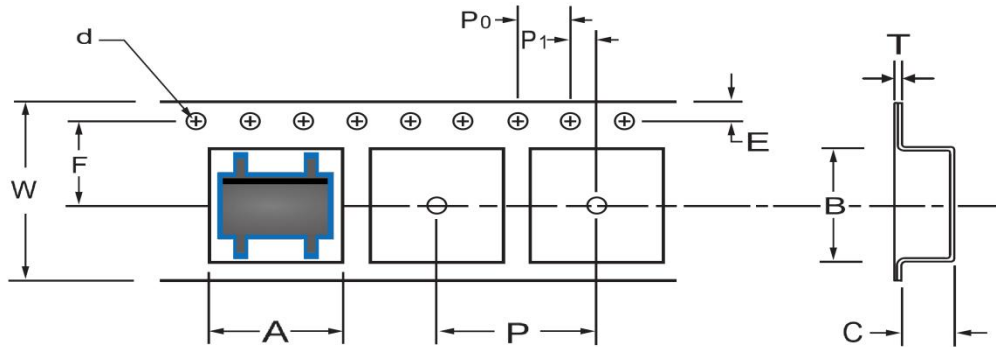
**Note:**

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

BRIDGE RECTIFIER

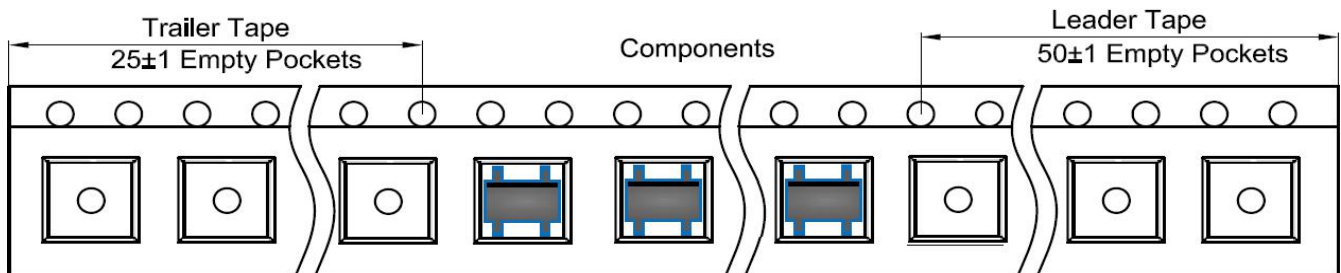
**MB-S Tape and Reel**

**MB-S Embossed Carrier Tape**

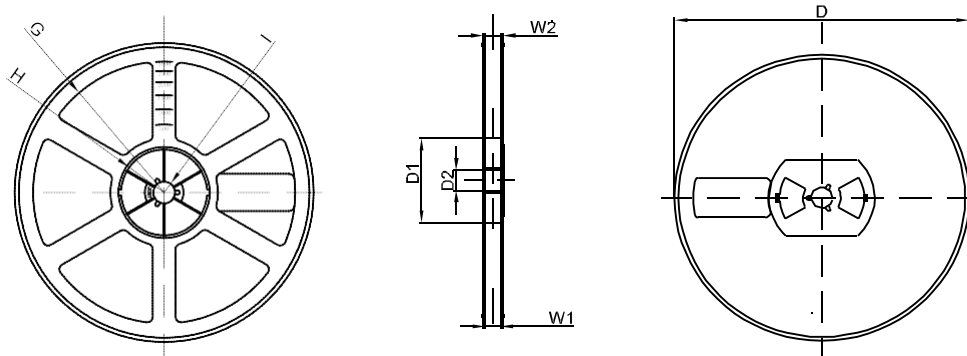


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
MB-S	5.00	7.24	3.33	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**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