

## 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### FEATURES:

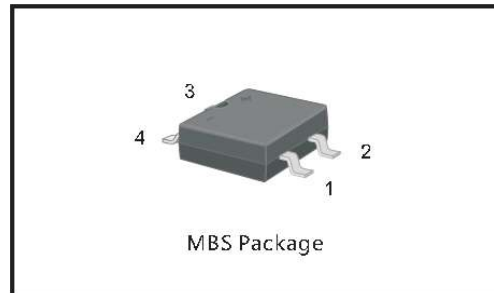
- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 0.8 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: MBS
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 100mg /0.0035oz

### PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )



### Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_a = 50^\circ\text{C}$	$I_o$	0.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30						A
Maximum Forward Voltage	at 0.4 A	1.0						V
	at 0.8 A							
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_a=25^\circ\text{C}$	5						$\mu\text{A}$
	@ $T_a=125^\circ\text{C}$							
Typical Junction Capacitance ( Note1 )	$C_j$	13						pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$	95						$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	30						
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C. 2. Mounted on glass epoxy PC board with 4×(5×5mm<sup>2</sup>) copper pad.

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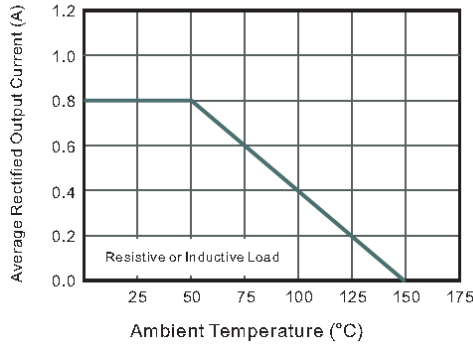
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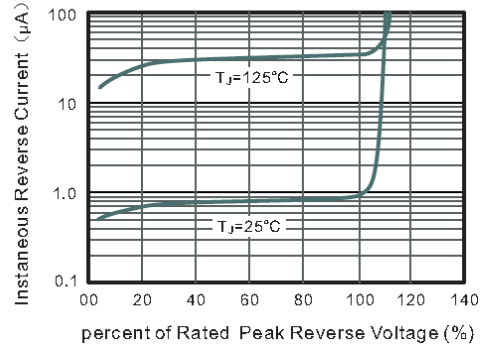


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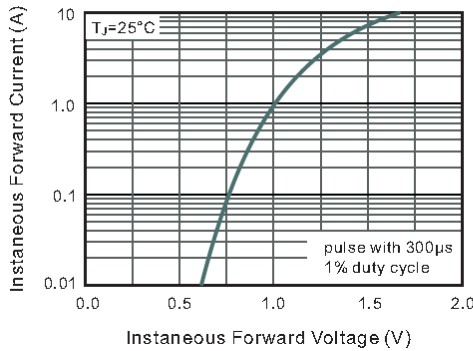
**Fig.1 Average Rectified Output Current Derating Curve**



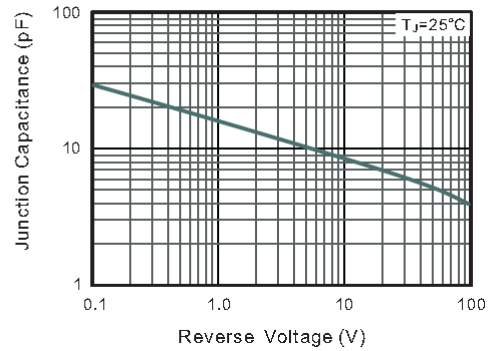
**Fig.2 Typical Reverse Characteristics**



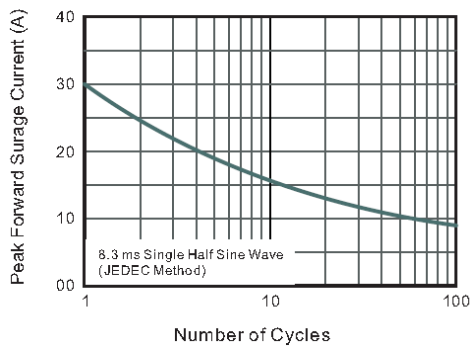
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



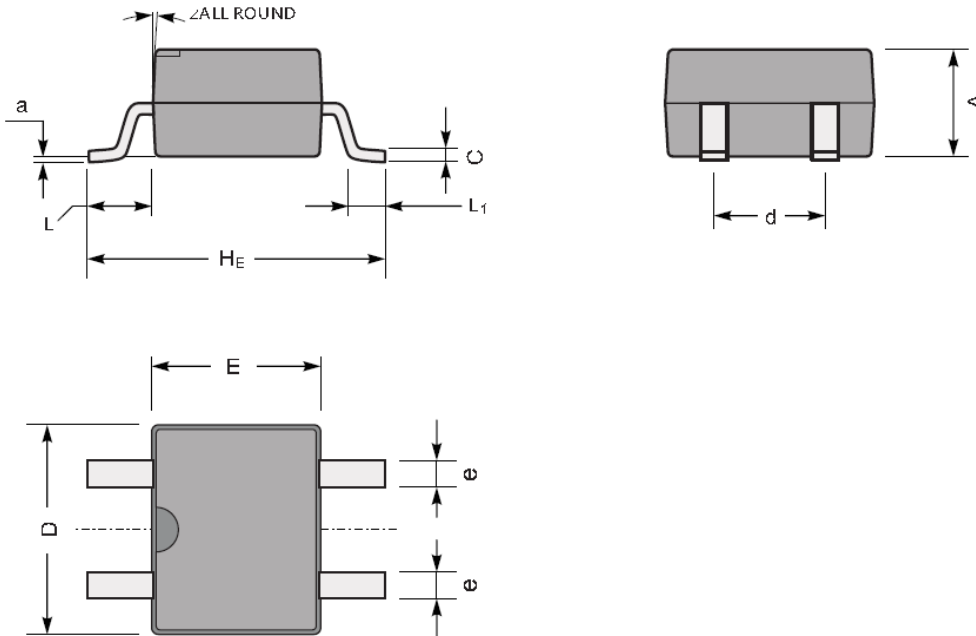
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## PACKAGE OUTLINE

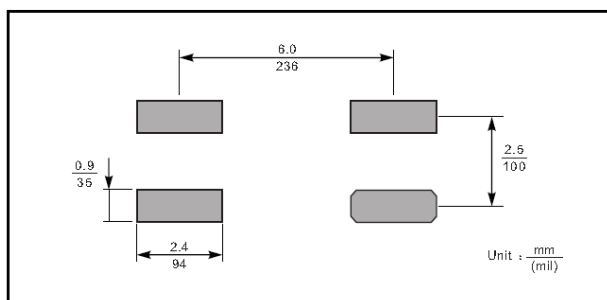
Plastic surface mounted package; 4 leads

MBS mechanical data



UNIT		A	C	D	E	H <sub>E</sub>	d	e	L	L <sub>1</sub>	a	∠
mm	max	2.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	7°
	min	2.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	—	
mil	max	102	8.7	197	161	276	106	28	67	43	8	
	min	94	5.9	177	142	252	91	20	51	20	—	

### The recommended mounting pad size



### Marking

Type number	Marking code
MB1S	MB1S
MB2S	MB2S
MB4S	MB4S
MB6S	MB6S
MB8S	MB8S
MB10S	MB10S

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