

# MB1S THRU MB10S

### 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**

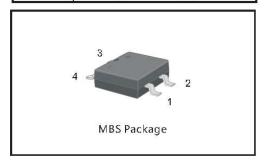
• Case: MBS

• 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 Rever	$V_{\text{RRM}}$	100	200	400	600	800	1000	V	
Maximum RMS voltage	$V_{\text{RMS}}$	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 Ta = 50 °C		Io	0.8						
Peak Forward Surge Current 8.3 Half Sine Wave Superimposed of (JEDEC Method)	Ifsm	30						A	
Maximum Forward Voltage at 0.4 A		$V_{F}$	1.0						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>A</sub> =25 °C	I <sub>R</sub>	5					μΑ	
Typical Junction Capacitance ( Note1 )		Cj	13						
Typical Thermal Resistance ( Note2 )		$R_{\theta JA}$	95						°C/W
		R <sub>θ</sub> л	30						
Operating and Storage Temperature Range		Tj, Tstg	-55 ∼ +150						$^{\circ}$

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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Fig.1 Average Rectified Output Current Derating Curve

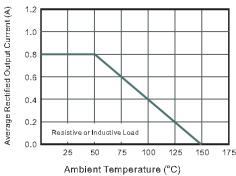


Fig.2 Typical Reverse Characteristics

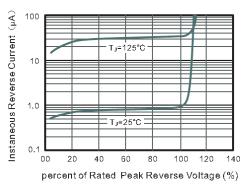


Fig.3 Typical Instaneous Forward Characteristics

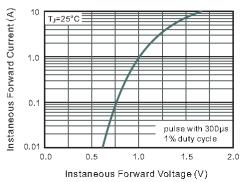


Fig.4 Typical Junction Capacitance

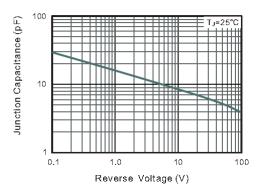
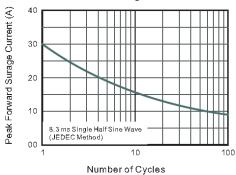


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



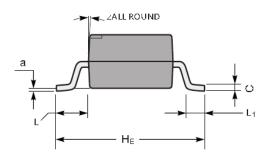


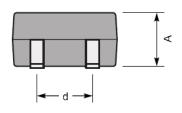
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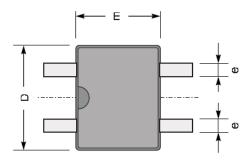
### **PACKAGE OUTLINE**

Plastic surface mounted package; 4 leads

MBS mechanical data

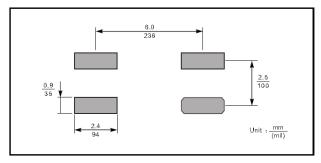






UNIT		А	С	D	E	Η <sub>E</sub>	d	е	L	L <sub>1</sub>	а	<b>∠</b>
mm	max	2.6	0.22	5.0	4.1	7.0	2.7	0.7	1.7	1.1	0.2	
	min	2.2	0.15	4.5	3.6	6.4	2.3	0.5	1.3	0.5	1	7∘
	max	102	8.7	197	161	276	106	28	67	43	8	′
mil	min	94	5.9	177	142	252	91	20	51	20	1	

### 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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## 单击下面可查看定价,库存,交付和生命周期等信息

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