

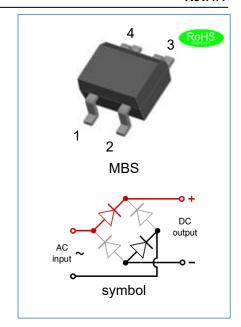
# JIEJIE MICROELECTRONICS CO., LTD.

# MB2S~MB10S GLASS PASSIVATED BRIDGE RECTIFIERS

Rev.4.4

#### **DESCRIPTION**

- Plastic package has underwriters laboratory flammability classification 94V-0
- ♦ Lead free in comply with EU RoHS 2011/65/EU directives
- ♦ Glass passivated chip junction
- ♦ Lead tin plated copper
- ♦ Ideal for automatic placement
- ♦ High surge forward current capability
- ♦ Reliable low cost construction utilizing molded plastic technique
- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.



#### **MECHANICAL DATA**

- ♦ Case: MBS molded plastic
- → Terminals: Solder plated, solderable per J-STD-002
- ♦ Polarity: Polarity symbol marking on body.
- ♦ Weight:0.12gram

#### ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified.)

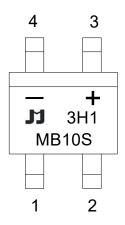
Parameter		Symbol	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Maximum repetitive peak reverse vol	$V_{RRM}$	200	400	600	800	1000	٧	
Maximum RMS voltage		V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage		V <sub>DC</sub>	200	400	600	800	1000	V
Average rectified output current at T <sub>A</sub> =40°C		lo	1.0				Α	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	30			Α		
Maximum forward voltage per diode @I <sub>F</sub> =1.0A		VF	1.1			<b>V</b>		
Maximum DC reverse current at T <sub>j</sub> =25℃		1_	5 500				μA	
rated DC blocking voltage per diode T <sub>j=125°C</sub>		I <sub>R</sub>				μA		
Typical junction capacitance V <sub>R</sub> =4.0V, f=1MHz		Сл	15			pF		
Operating junction and storage temperature range		T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150				$^{\circ}\!$	

## THERMAL RESISTANCES

Symbol	Parameter	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
R <sub>th(j-a)</sub>	Junction to ambient (note1)		75				°C/W

Note1: On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3 mm) pads.

#### **MARKING**



MB	MB Series				
10	V <sub>RRM</sub> :1000V				
S	Package: MBS				

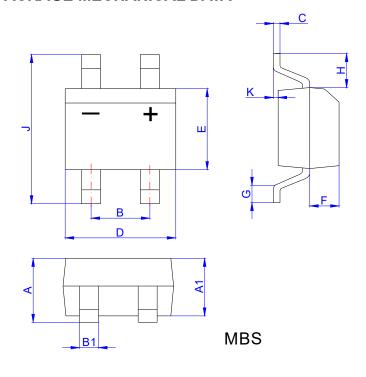
 $\underline{\mathbf{x}}$ H1: Month, 1, 2, 3  $\sim$  9, A, B, C

3<u>x</u>1:

2018	2019	2020	2021	2022	2023	2024
Н		J	K	Ш	М	Ν
2025	2026	2027	2028	2029	2030	
0	Р	Q	R	S	Т	

3Hx: Batch number

#### **PACKAGE MECHANICAL DATA**



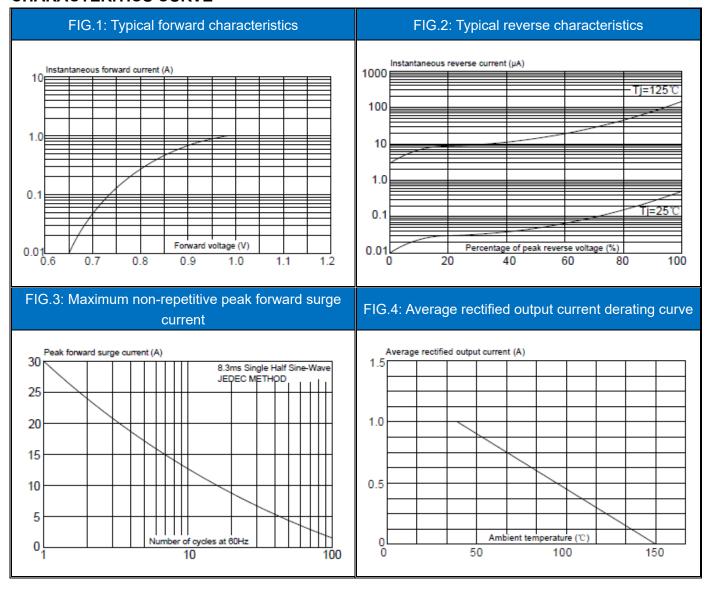
	Dimensions					
Ref.	Millim	neters	Inches			
	Min.	Max.	Min.	Max.		
Α		3.00		0.118		
A1	2.30	2.70	0.091	0.106		
В	2.20	2.60	0.087	0.102		
В1	0.56	0.84	0.022	0.033		
С	0.15	0.35	0.006	0.014		
D	4.50	4.90	0.177	0.193		
E	3.60	4.00	0.142	0.157		
F	0.95	1.53	0.037	0.060		
G	0.70	1.10	0.028	0.043		
Н	1.10	2.12	0.043	0.083		
J		7.00		0.276		
K		0.20		0.008		

## **PACKAGE INFORMATION-MBS**

OUTLINE	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	REEL DIAMETERS (mm)
TAPING	0.12	3,000	48,000	330



#### **CHARACTERITICS CURVE**





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