

### MB05S-MB10S

Technical Data Data Sheet N0529, Rev. B Green Products

### MB05S THRU MB10S

# Single-Phase 0.8A Surface Mount Glass Passivated Bridge Rectifier

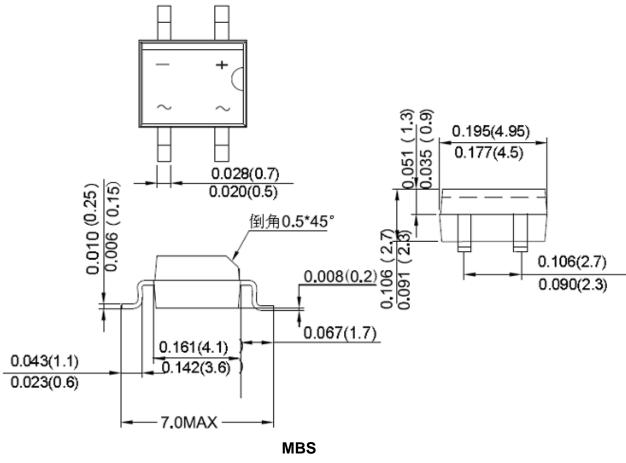
#### Features:

- Glass passivated die construction
- Low leakage
- Ideal for printed circuit board
- Surge overload rating-30A peak
- Designed for Surface Mount Application
- Plastic Material-UL Flammability 94V-0

#### **Mechanical Data:**

- Case: Reliable low cost construction utilizing molded plastic technique
- Terminals: Plated Leads Solderable per MILSTD-202, Method208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number

### **Mechanical Dimensions: In Inches/mm**



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#### Technical Data Data Sheet N0529, Rev. B Ordering Information:

Device	Package	Shipping
MB05S-MB10S	MBS (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{\text{RMS}}$	35	70	140	280	420	560	700	V
Average forward rectified output current(Note 1) $@T_A = 40^{\circ}C$ (Note 2) $@T_A = 40^{\circ}C$	Ι <sub>ο</sub>	0.5 0.8						A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							A
Forward Voltage (per element) @I <sub>F</sub> =0.8A	$V_{FM}$	1.1						V	
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	I <sub>RM</sub>	5 500						μA	
Typical Junction Capacitance(per leg) (Note 3)	CJ	13						рF	
Typical Thermal Resistance (per leg)	$R_{_{ extsf{ heta}JA}}$	70 20						°C/W	
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150						°C	

Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

2. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.

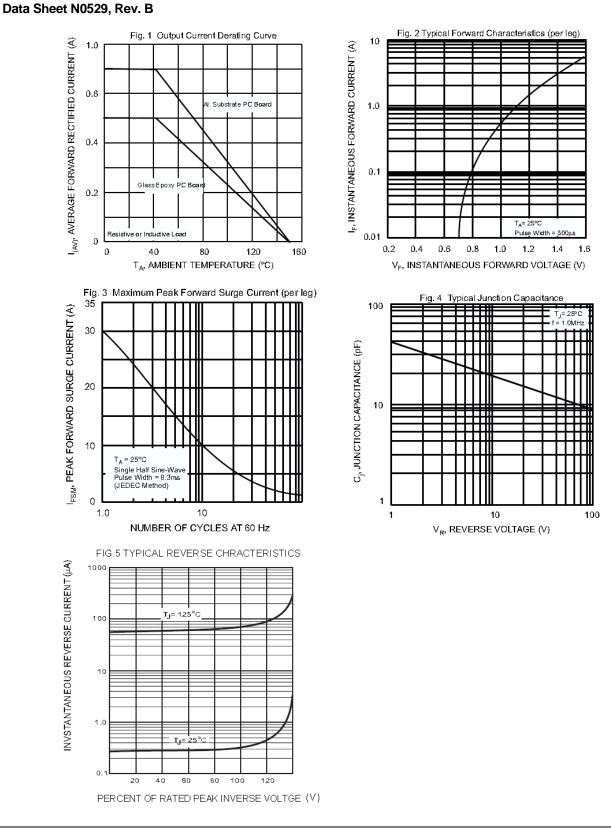
3. Measured at 1.0 MHZ and applied reverse voltage of 4.0 VDC



**Technical Data** 

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