



# B1005S SERIES

## MINI SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

**VOLTAGE** 50~1000 Volts **CURRENT** 1 Amperes

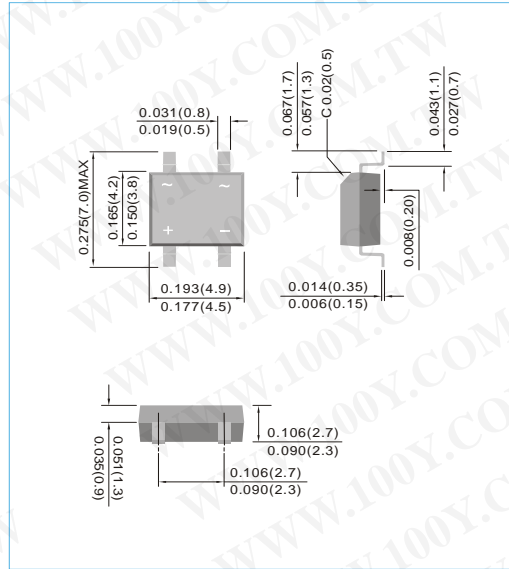
**MDI** Unit : inch(mm)

### FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-0
- Low leakage
- Surge overload rating--30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500/228
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols molded or marking on body
- Mounting Position: Any
- Weight: 0.0044 ounce, 0.1268 gram



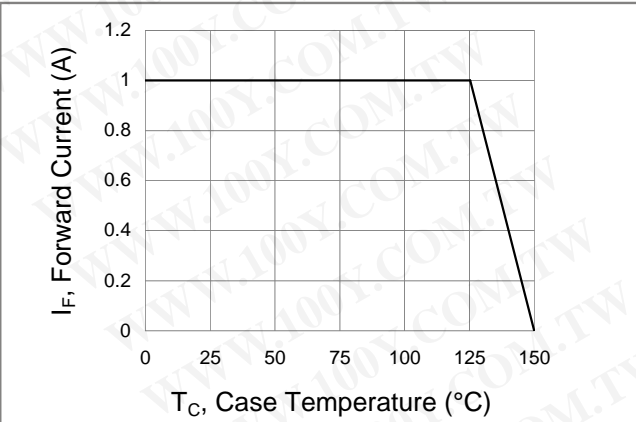
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

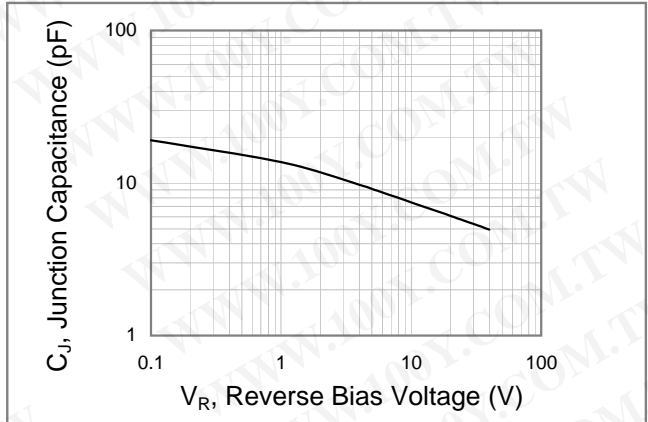
PARAMETER	SYMBOL	B1005S	B101S	B102S	B104S	B106S	B108S	B1010S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_R$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30							A
Maximum Forward Voltage Drop per Bridge Element at 1A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5							$\mu A$
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	85 20							$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							$^{\circ}C$



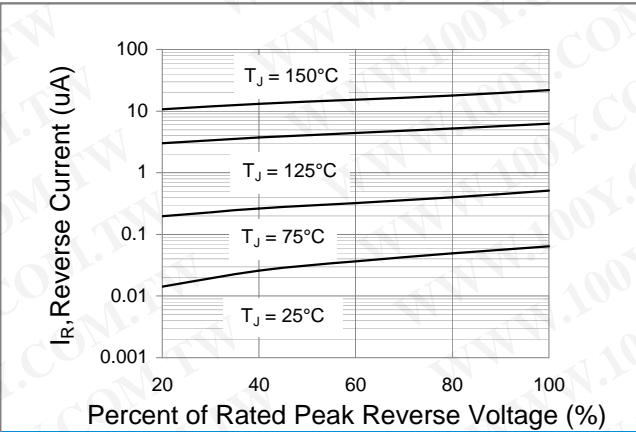
# B1005S SERIES



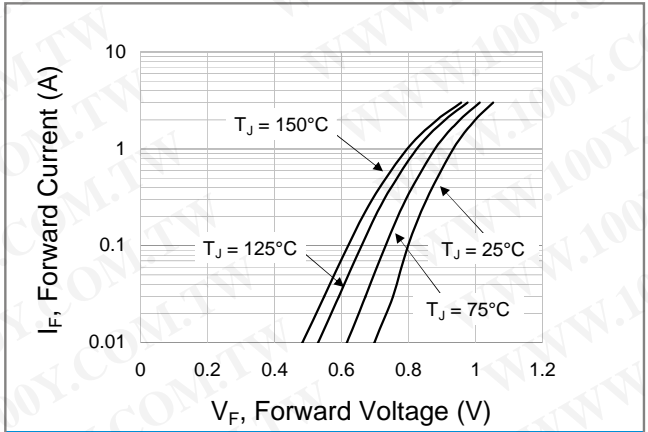
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**

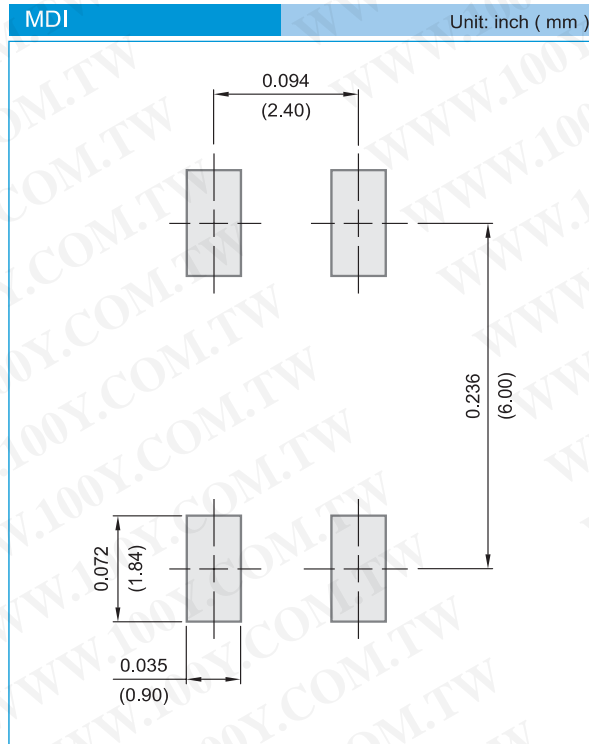


**Fig.4 Typical Forward Characteristics**



## B1005S SERIES

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information  
T/R - 3K per 13" plastic Reel

### LEGAL STATEMENT

#### Copyright PanJit International, Inc 2011

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.