



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

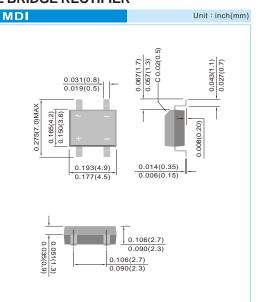
VOLTAGE 50~1000 Volts CURRENT 1 Amperes MDI

### **FEATURES**

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating--30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in comply 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



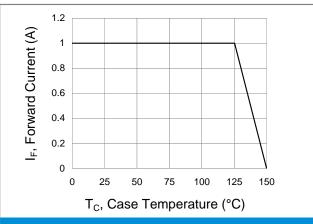
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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 <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>R</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1						А	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							А
Maximum Forward Voltage Drop per Bridge Element at 1A	V <sub>F</sub>	1.1						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	5							μА
Typical Thermal Resistance	R <sub>eja</sub> R <sub>ejl</sub>	85 20						°C / W	
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150						°C	







**Fig.1 Forward Current Derating Curve** 

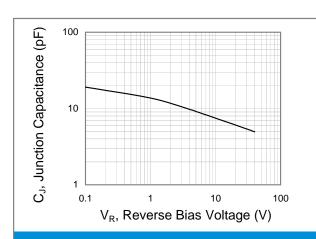


Fig.2 Typical Junction Capacitance

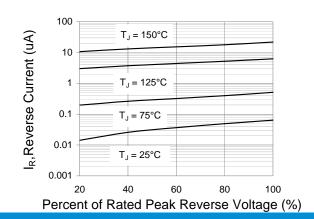
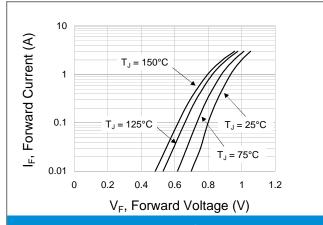


Fig.3 Typical Reverse Characteristics

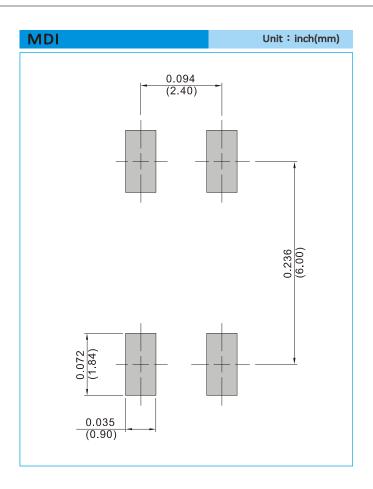


**Fig.4 Typical Forward Characteristics** 





### MOUNTING PAD LAYOUT



### **ORDERINFORMATION**

• Packing information

T/R - 3K per 13" plastic Reel





Part No\_packing code\_Version

B1005S\_R2\_00001 B1005S\_R2\_10001

# For example : RB500V-40\_R2\_00001 Part No. Serial number Version code means HF Packing size code means 13" Packing type means T/R

Packing Code XX					Version Code XXXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code			
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number			
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number			
Bulk Packing (B/P)	В	13"	2						
Tube Packing (T/P)	Т	26mm	X						
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y						
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U						
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D		_				





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