



# B1S~B10S

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

**VOLTAGE** 100 to 1000Volts **CURRENT** 0.5 Amperes

**MDI** Unit: inch(mm)

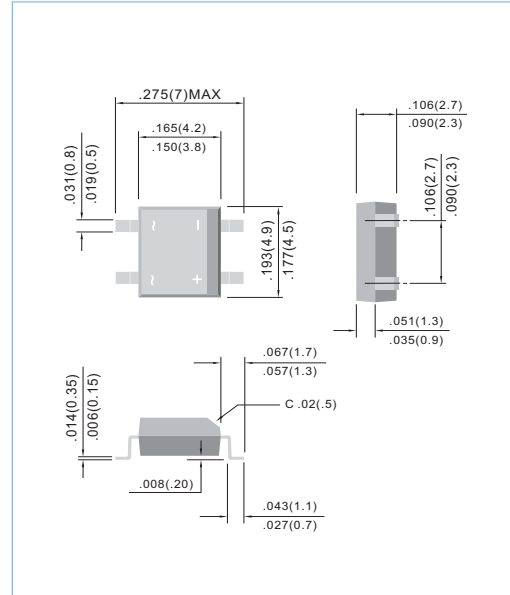
**Recongnized File # E111753**

### 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
- 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: 0.008 ounce, 0.22 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	B1S	B2S	B4S	B6S	B8S	B10S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_A=40^{\circ}C$ $T_A=25^{\circ}C$ (Note 3)	$I_{F(AV)}$				0.5			A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$				30			A
$I^2t$ Rating for fusing ( $t < 8.35ms$ )	$I^2t$				3.735			A <sup>2</sup> t
Maximum Forward Voltage Drop per Bridge Element at 0.5A	$V_F$				1.0			V
Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=125^{\circ}C$	$I_R$				5.0			uA
Typical Junction capacitance (Note 1)	$C_J$				25			pF
Typical thermal resistance per leg ((Note 2)	$R_{\theta JA}$ $R_{\theta JL}$				85			$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$				-55 to + 150		$^{\circ}C$	

**NOTES:**

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X 0.5"(13 X 13mm) copper pads
3. \*R-load on alumina substrate



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## RATING AND CHARACTERISTIC CURVES

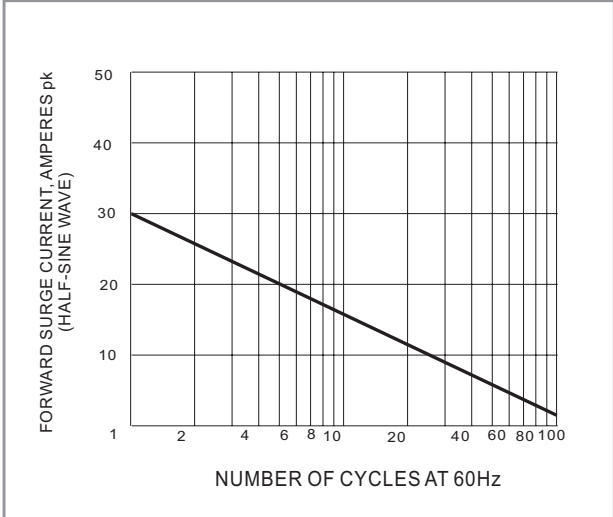


Fig.1 MAXIMUM NON-REPETITIVE SURGE CURRENT

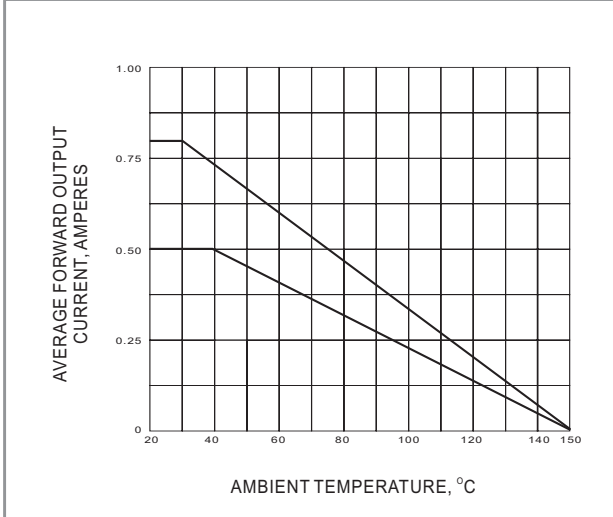


Fig.2 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

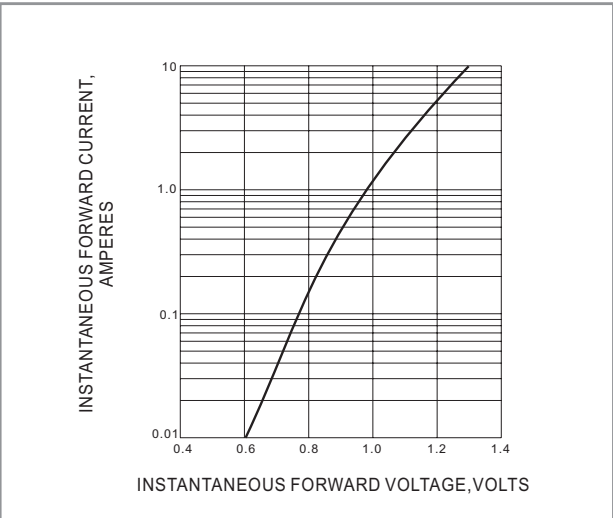


Fig.3 TYPICAL FORWARD CHARACTERISTICS

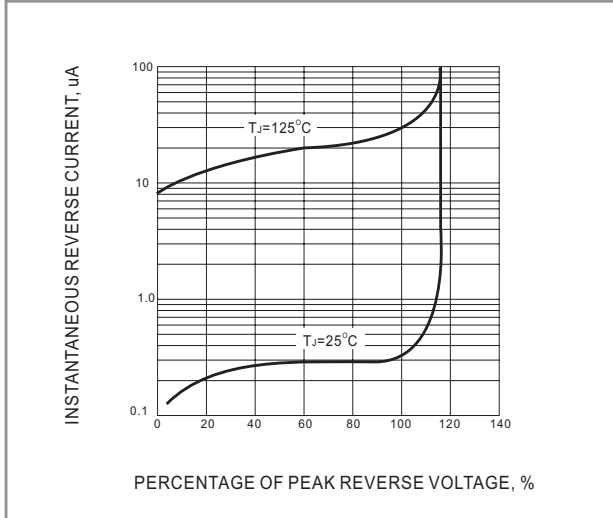
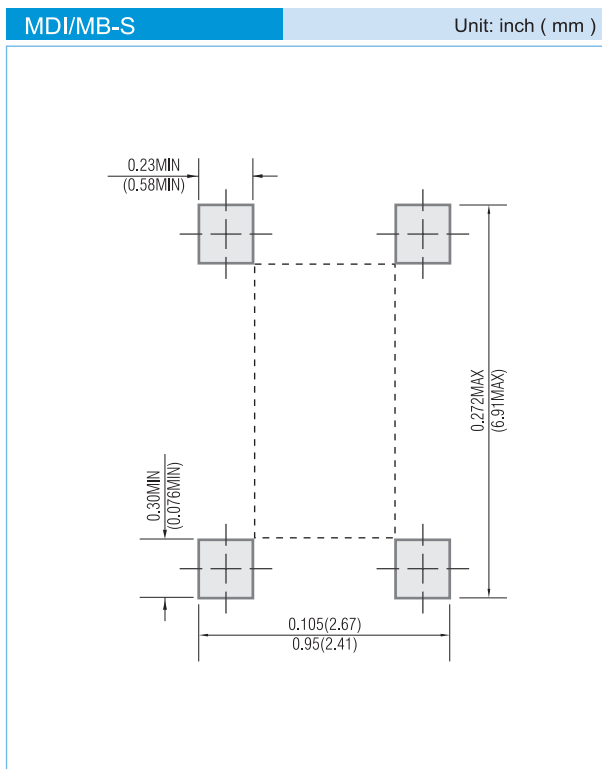


Fig.4 TYPICAL REVERSE CHARACTERISTICS



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

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