

### YEA SHIN TECHNOLOGY CO., LTD

### **B1S THRU B10S**

## MINI SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER VOLTAGE 100 to 1000Volts CURRENT 0.5 Amperes



#### **FEATURES**

Plastic material used carries Underwriters

Laboratory recognition 94V-0

Low leakage

Surge overload rating - 35 amperes peak

Ideal for printed circuit board

Exceeds environmental standards of MIL-S-19500

High temperature soldering :  $260^{\circ}\text{C}$  / 10 seconds at terminals Pb free product at available : 99% Sn above meet RoHS

environment substance directive request

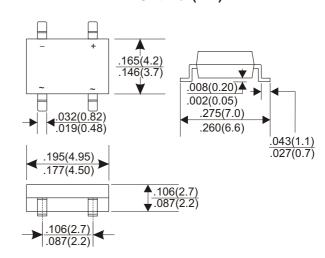
#### **MECHANICAL DATA**

Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

Terminals: Lead solderable per MIL-STD-202, Method 208. Polarity: Polarity symbols molded or marking on body.

Mounting Position: Any.

### MDI Unit:inch(mm)



#### 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%

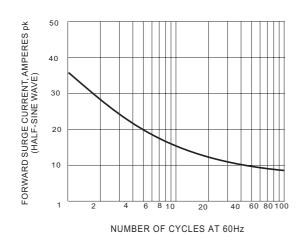
PARAMETER		SYMBOL	B1S	B2S	B4S	B6S	B8S	B10S	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		VRMS	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		VDC	100	200	400	600	800	1000	V
Maximum Average Forward Current at	on alumina substrate at TA = 25 °C	10)/	0.8						A
	on glass-epoxy at TA = 40 °C	IAV	0.5						
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)		IFSM	35						Α
I <sup>2</sup> t Rating for fusing (t<8.35ms)		I <sup>2</sup> t	5.085					$A^2 t$	
Maximum Forward Voltage Drop per Bridge Element at 0.5A		VF	1.0					V	
Maximum DC Reverse Current TJ=25		IR	5.0						uA
at Rated DC Blocking Voltage TJ=125			500						
Typical Junction capacitance (Note 1)		CJ	25					pF	
Typical thermal resistance per leg (Note2)		RθJA	85						/W
		RŧJL	20						
Operating Junction and Storage Temperature Range		TJ, TSTG	-55 to +150						

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 13 mm) copper pads.

# **DEVICE CHARACTERISTICS**

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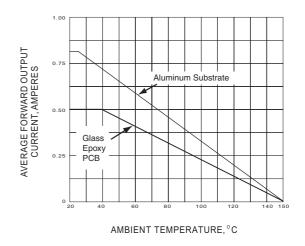
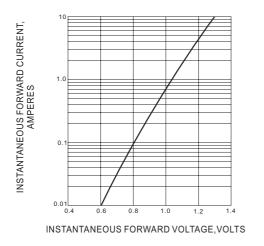


Fig.1 MAXIMUM NON-REPETITIVE SURGE CURRENT

Fig.2 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT



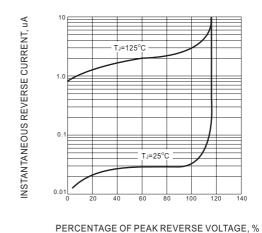


Fig.3 TYPICAL FORWARD CHARACTERISTICS

Fig.4 TYPICAL REVERSE CHARACTEISTICS