DATA SHEET

B1S~B10S

MINI SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE - 100 to 1000 Volts CURRENT - 0.5 Amperes

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

MECHANICAL DATA

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

Terminals: Lead solderable per MIL-STD-202, Method 208.

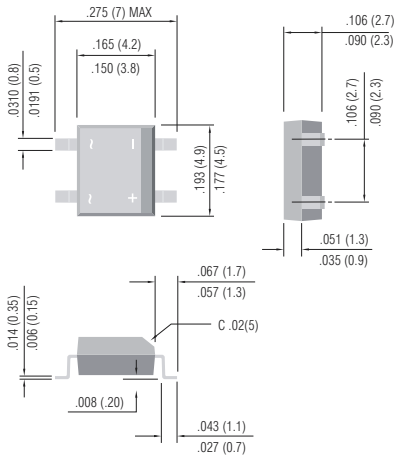
Polarity: Polarity symbols molded or marking on body.

Mounting Position: Any.

Weight: 0.008 ounce, 0.22 gram.

Unit: inch (mm)

MDI



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

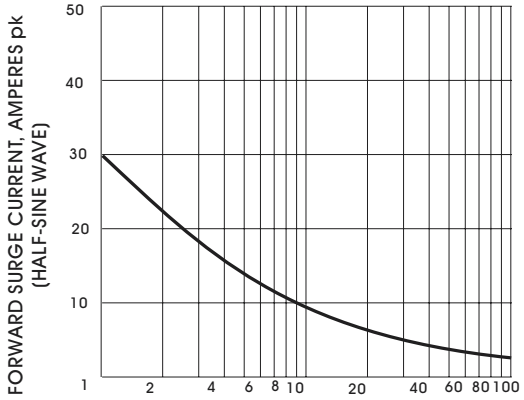
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, Resistive or inductive load.
For capacitive load, derate current by 20%

	B1S	B2S	B4S	B6S	B8S	B10S	UNIT
Maximum Recurrent Peak Reverse Voltage	100	200	400	600	800	1000	V
Maximum RMS Bridge input Voltage	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	100	200	400	600	800	1000	V
Maximum Average Forward Current T_A=30°C on glass-epoxy P.C.B (Note 1) on aluminum substrate (Note 3)	0.5 0.8						A
Peak Forward Surge Current, 8.3ms singlehalf sine-wave superimposed on rated load	30.0						A
I^2t Rating for fusing (t < 8.35 ms)	5.0						A^2t
Maximum Forward Voltage Drop per Bridge Element at 0.5A	1.00						V
Maximum Reverse Current at Rated T_J= 25°C DC Blocking Voltage per element T_J=125°C	5.0						μA mA
Typical Junction capacitance per leg (Note 1) CJ	25.0						pF
Typical Thermal resistance per leg (Note 2) RθJA Typical Thermal resistance per leg (Note 2) RθJA	85.0						°C/W
Operating Temperature Range T_J	-55 to 150						°C
Storage Temperature Range T_A	-55 to 150						°C

NOTES:

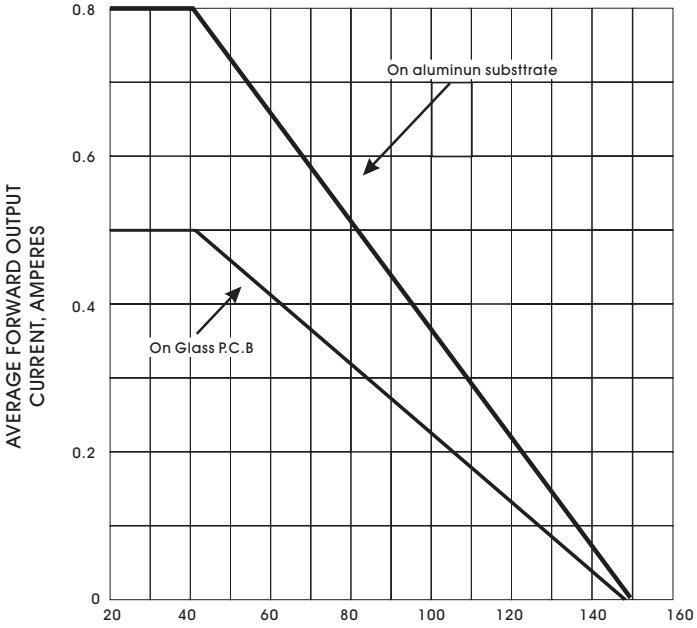
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.05 X 0.05"(13 x 13mm) copper pads.
3. On alum: substrate P.C.B with an rea of 0.8 x 0.8 x 0.25" (20 x 20 x 6.4mm) mounte on 0.05 x 0.05 "(13 x 13 mm) solder pad.

RATING AND CHARACTERISTIC CURVES



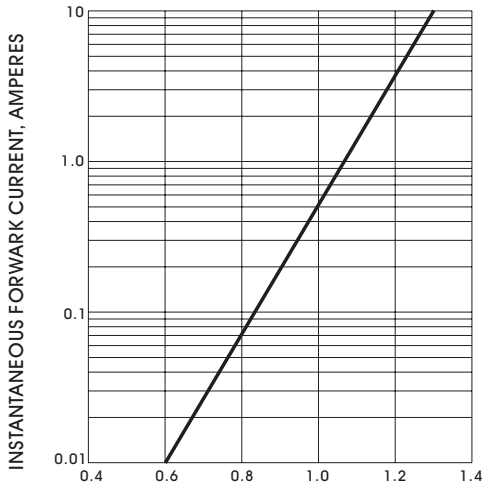
NUMBER OF CYCLES AT 60Hz

Fig.1-MAXIMUM NON-REPETITIVE SURGE CURRENT



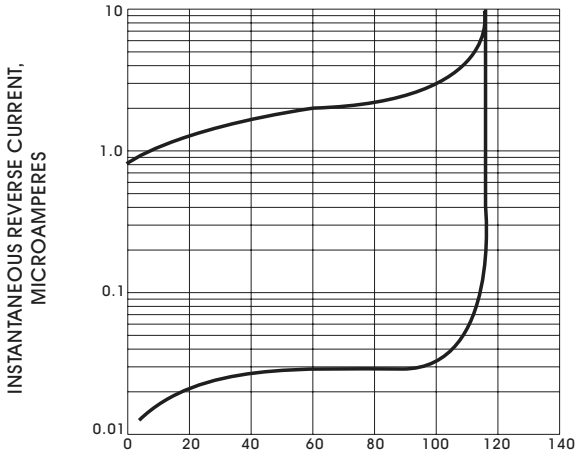
AMBIENT TEMPERATURE, OC

Fig.2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

Fig.3-TPICAL FORWARD CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE

Fig.4-TYPICAL REVERSE CHARACTERISTICS