



DATA SHEET

DI100~DI1010

DUAL-IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT - 1.0 Ampere



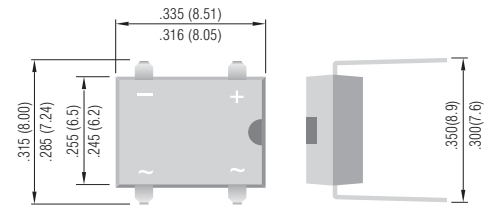
Recognized File #E111753

DIP

Unit: inch (mm)

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



MECHANICAL DATA

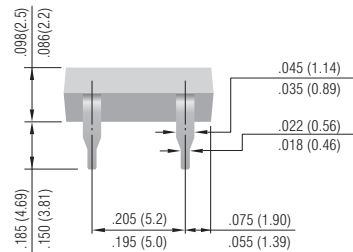
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

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

Polarity: Polarity symbols molded or marking on body.

Mounting Position: Any.

Weight: 0.02 ounce, 0.40 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%

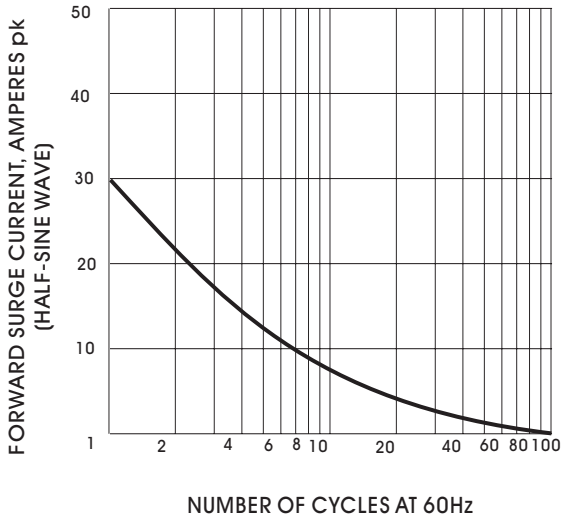
	DI100	DI101	DI102	DI104	DI106	DI108	DI1010	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_A=40^\circ\text{C}$	1.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	30.0							A
I ² t Rating for fusing (t < 8.35 ms)	10.0							A ² t
Maximum Forward Voltage Drop per Bridge Element at 1.0A	1.1							V
Maximum Reverse Current at Rated $T_J=25^\circ\text{C}$	5.0							μA
DC Blocking Voltage per element $T_J=125^\circ\text{C}$	0.5							mA
Typical Junction capacitance per leg (Note 1) C _J	25.0							pF
Typical Thermal resistance per leg (Note 2) R θ JA	40.0							°C/W
Typical Thermal resistance per leg (Note 2) R θ JL	15.0							
Operating Temperature Range T_J	-55 to 125							°C
Storage Temperature Range T_A	-55 to 150							°C

NOTES:

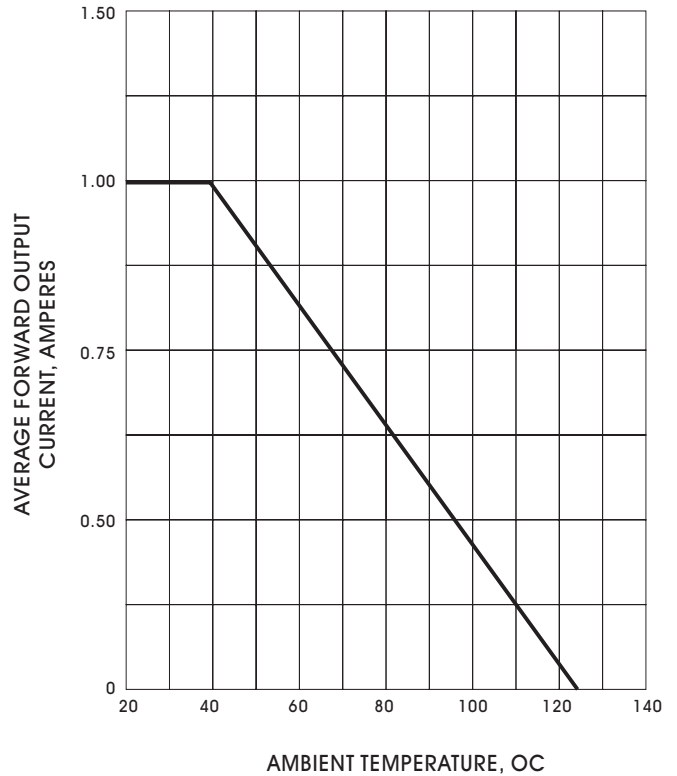
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X 0.5" (13 X 13mm) copper pads.



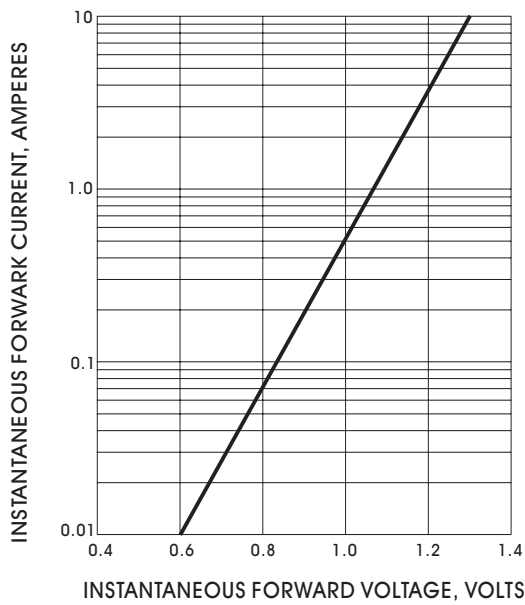
RATING AND CHARACTERISTIC CURVES



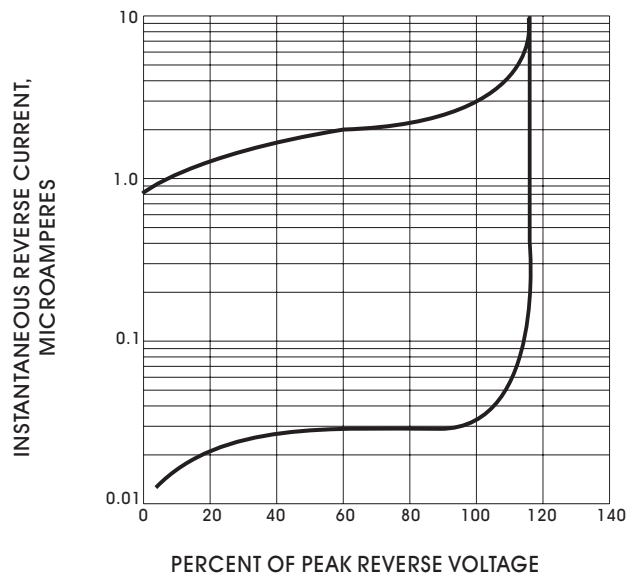
NUMBER OF CYCLES AT 60Hz
Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT



AMBIENT TEMPERATURE, °C
Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT



INSTANTANEOUS FORWARD VOLTAGE, VOLTS
Fig. 3-TYPICAL FORWARD CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE
Fig. 4-TYPICAL REVERSE CHARACTERISTICS