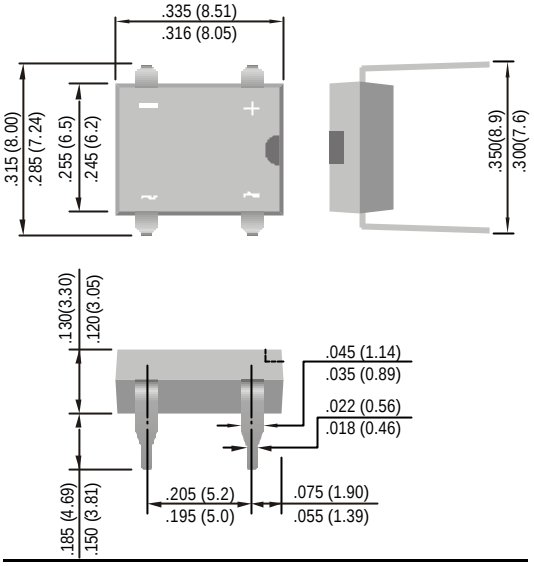
DI100/150 THRU DI1010/1510

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

VOLTAGE - 50 to 1000 Volts CURRENT - 1.0~1.5 Amperes

Recongnized File #E111753

DIP



FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating— 30~50 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, 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ^{O}C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, Resistive or inductive load.

For capacitive load, derate current by 20%.

		DI100 DI150	DI101 DI151	DI102 DI152	DI104 DI154	DI106 DI156	DI108 DI158	DI1010 DI1510	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 ^{O}C	DI100 DI150	1.0 1.5							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	DI100 DI150	30.0 50.0							A
I^2t Rating for fusing (t < 8.35 ms)		10.0							A^2t
Maximum Forward Voltage Drop per Bridge Element at 1.0A		1.1							V
Maximum Reverse Current at Rated T_J= 25^{O}C DC Blocking Voltage per element T_J=125 ^{O}C		5.0 0.5							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) RθJL		40.0 15.0							^{O}C /W
Operating Temperature Range T_J		-55 to +125							^{O}C
Storage Temperature Range T_A		-55 to +150							^{O}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 0.5x0.5"(13 x 13mm) copper pads

RATING AND CHARACTERISTIC CURVES

DI100/150 THRU DI1010/1510

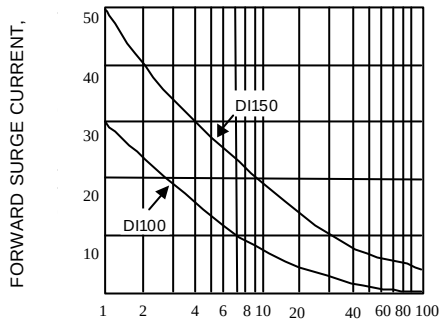


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

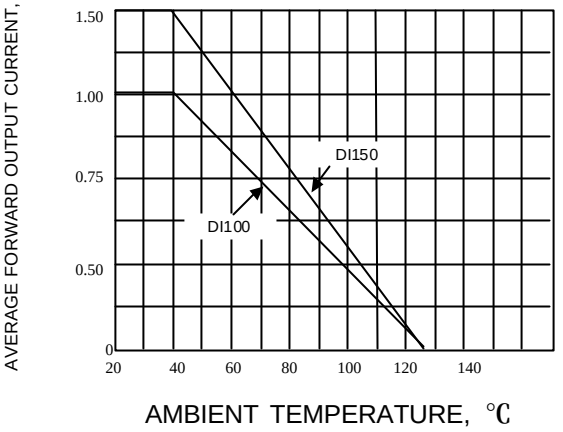


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

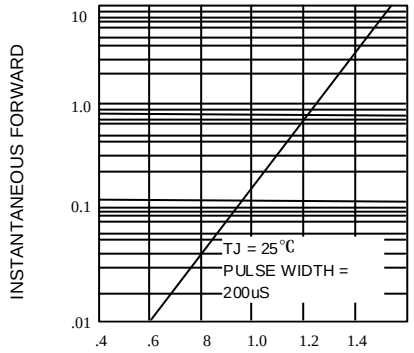


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

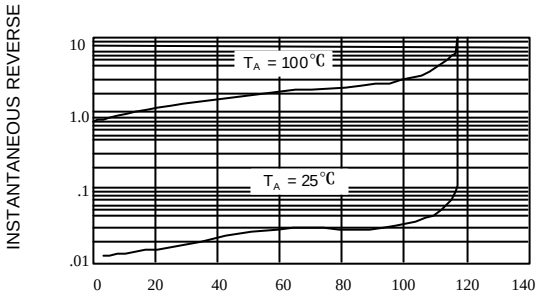


Fig. 4-TYPICAL REVERSE CHARACTERISTICS