

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

 Recognized File #E111753

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

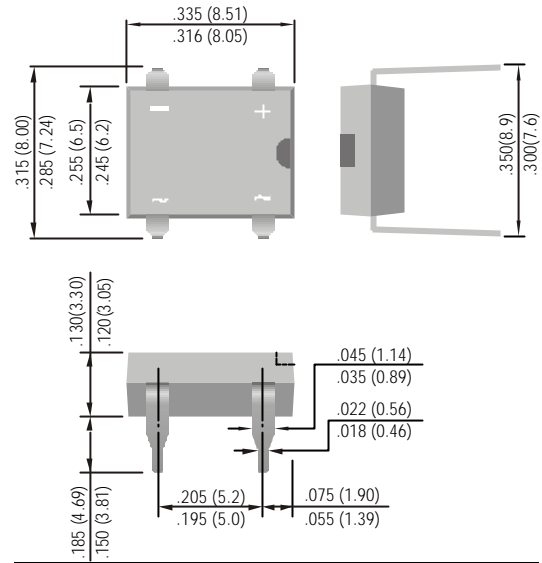
Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols molded or marking on body

Mounting Position: Any

Weight: 0.02 ounce, 0.4 gram

DIP



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 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°C	DI100	1.0						A
	DI150	1.5						
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	DI100	30.0						A
	DI150	50.0						
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°C	5.0						μA	
DC Blocking Voltage per element T _J =125°C	0.5						mA	
Typical Junction capacitance per leg (Note 1) C _J	25.0						pF	
Typical Thermal resistance per leg (Note 2) R _{θJA}	40.0						°C/W	
Typical Thermal resistance per leg (Note 2) R _{θJL}	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 0.5x0.5" (13 x 13mm) copper pads

RATING AND CHARACTERISTIC CURVES

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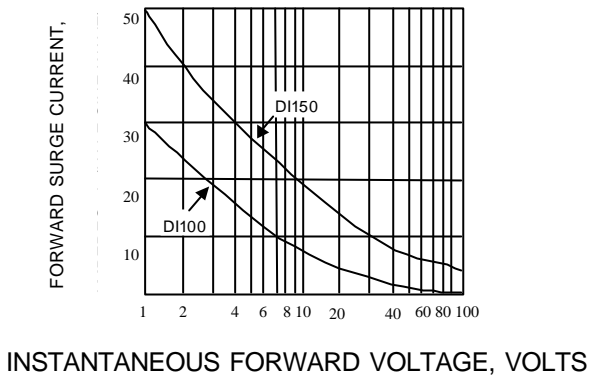


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT

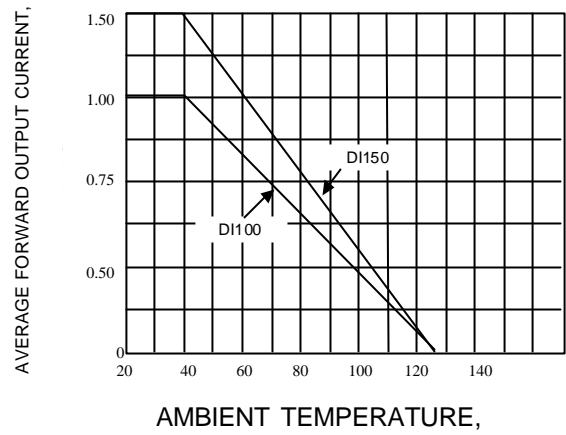


Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

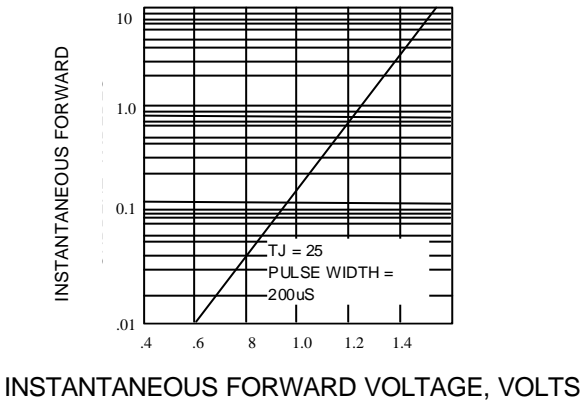


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

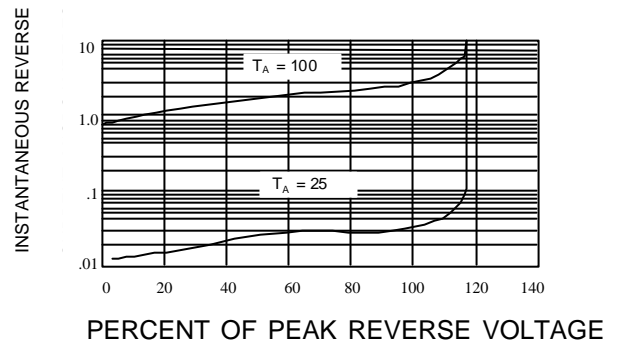


Fig. 4-TYPICAL REVERSE CHARACTERISTICS