

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

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

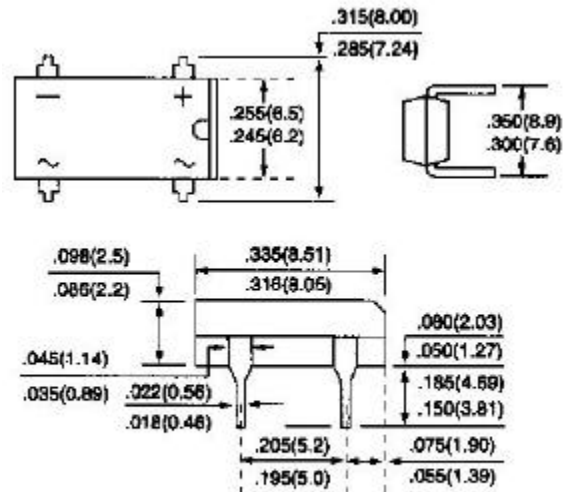
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 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 $T_A=40$	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^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 $T_J=25$						5.0		A	
DC Blocking Voltage per element $T_J=125$						0.5		mA	
Typical Junction capacitance per leg (Note 1) C_J						25.0		pF	
Typical Thermal resistance per leg (Note 2) R_{JA}						40.0		/W	
Typical Thermal resistance per leg (Note 2) R_{JL}						15.0			
Operating Temperature Range T_J						-55 to +125			
Storage Temperature Range T_A						-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 0.5×0.5"(13×13mm) copper pads

RATING AND CHARACTERISTIC CURVES

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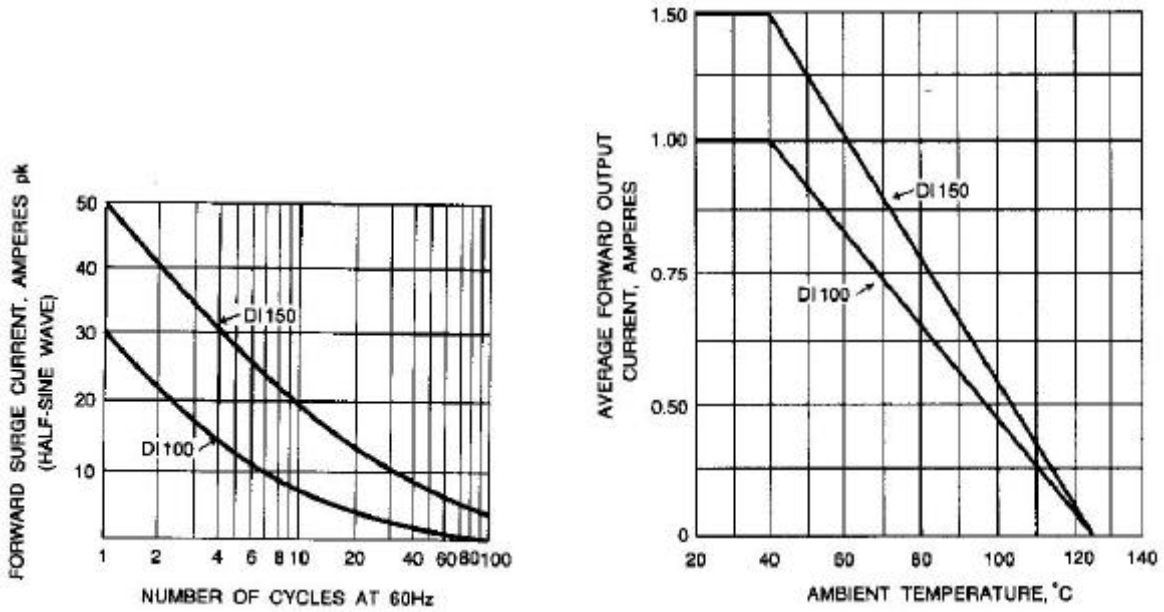


Fig. 1-MAXIMUM NON-REPETITIVE SURGE CURRENT Fig. 2-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

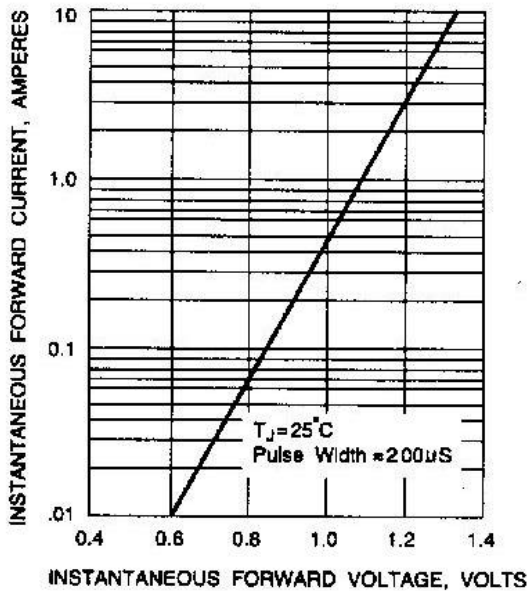


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

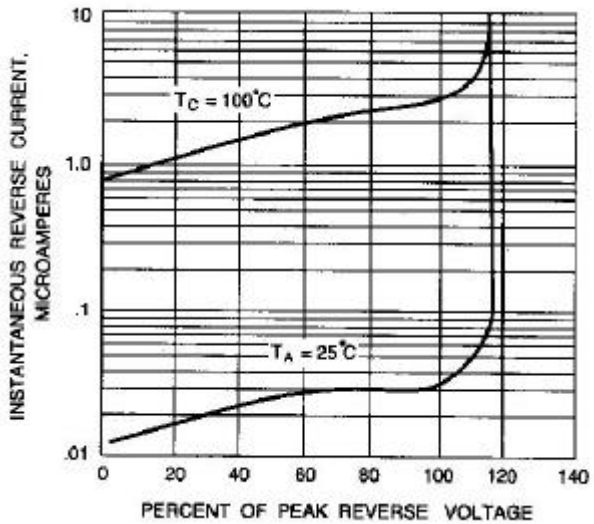


Fig. 4-TYPICAL REVERSE CHARACTERISTICS