DB100/150 THRU DB1010/1510

DUAL-IN-LINE GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE - 50 to 1000 Volts CURRENT - 1.0-1.5 Ampere

Recongnized

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.

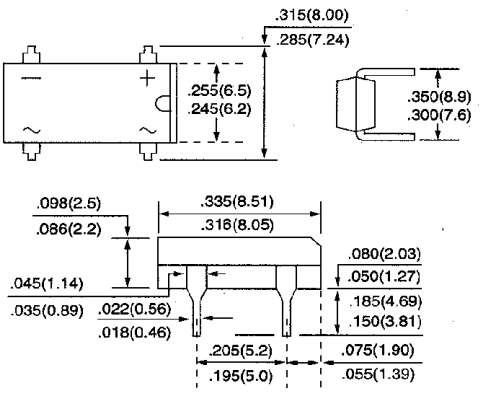
Terminals: Lead solderable per MIL-STD-202, Method 208.

Polarity: Polarity symbols molded or marking on body.

Mounting position: Any.

Weight: 0.02 ounce, 0.4 gram.

DIP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	DB100 DB150	DB101 DB151	DB102 DB152	DB104 DB154	DB106 DB156	DB108 DB158	DB1010 DB1510	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 DI100 / DI150 $T_A = 40°C$	1.0 / 1.5							A
Peak Forward Surge Current, 8.3 ms 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 1.0 A	1.1							V
Maximum Reverse Current at Rated $T_J = 25°C$ / DC Blocking Voltage per element $T_J = 125°C$	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							°C/W
Operating Temperature Range T_J	-55 to 125							°C
Storage Temperature Range T_A	-55 to 150							°C

NOTES:
1. Measured at 1.0MHZ 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.

SURGE COMPONENTS, INC. 1016 GRAND BLVD., DEER PARK, NY 11729
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RATING AND CHARACTERISTIC CURVES
DB100/150 THRU DB1010/1510

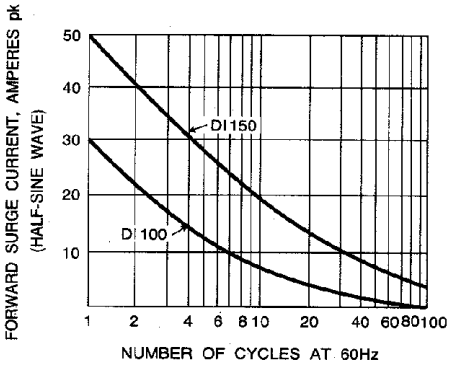


Fig. 1 – MAXIMUM NON-REPETITIVE SURGE CURRENT

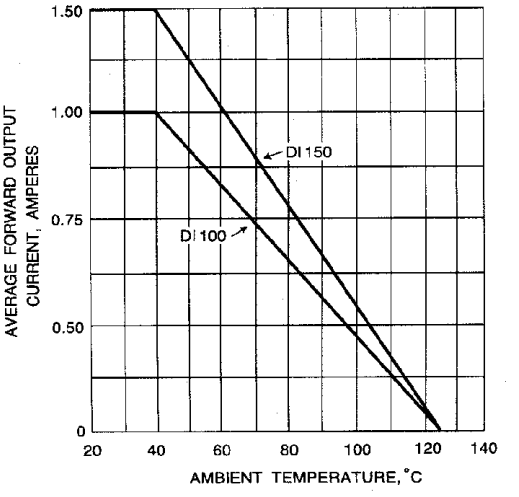


Fig. 2 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

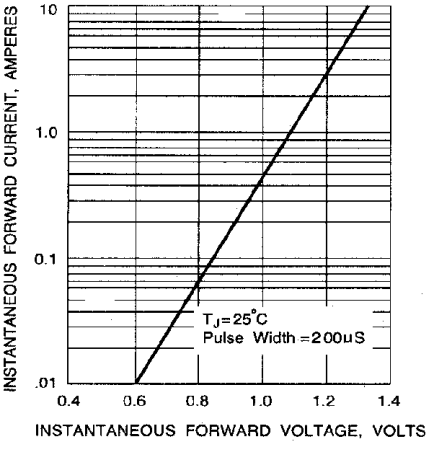


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

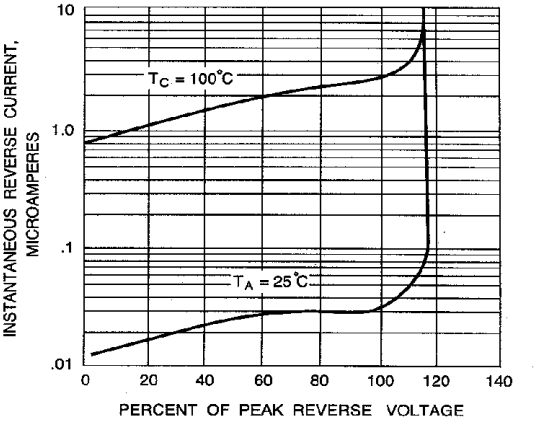


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

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