

# DI100~DI1010

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

**VOLTAGE** 50 to 1000 Volt **CURRENT** 1 Ampere

**DIP** Unit : inch(mm)



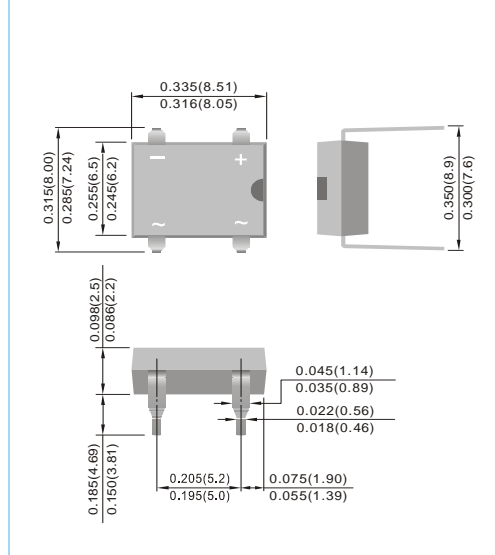
Recognized File #E111753

### FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-O
- Low leakage
- Surge overload rating-- 30 amperes peak
- Ideal for printed circuit board
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols molded or marking on body
- Weight: 0.012 ounces, 0.33 grams



## 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%

PARAMETER	SYMBOL	DI100	DI101	DI102	DI104	DI106	DI108	DI1010	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current	I <sub>AV</sub>	1							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30							A
I <sup>2</sup> t Rating for fusing (t<8.35ms)	I <sup>2</sup> t	3.735							A <sup>2</sup> t
Maximum Forward Voltage Drop per Bridge Element at 1A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	5 500							uA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance Per Leg (Note 2)	R <sub>θJA</sub> R <sub>θJL</sub>	40 15							°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

### NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 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

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### RATING AND CHARACTERISTIC CURVES

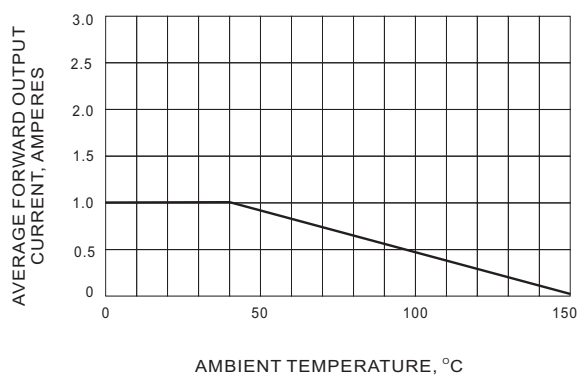


FIG.1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

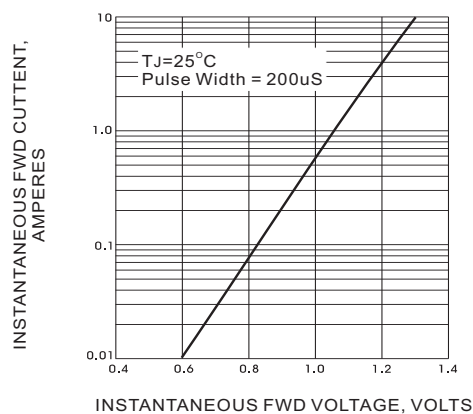


FIG.2 TYPICAL FORWARD CHARACTERISTICS

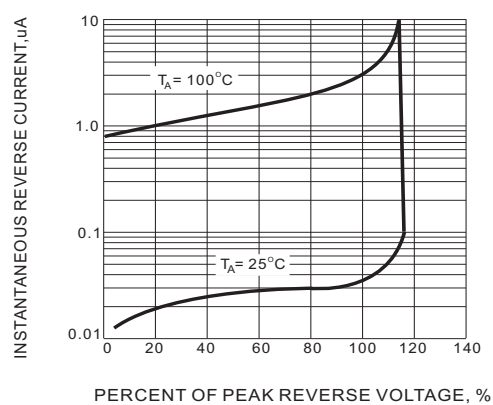


FIG.3 TYPICAL REVERSE CHARACTERISTICS

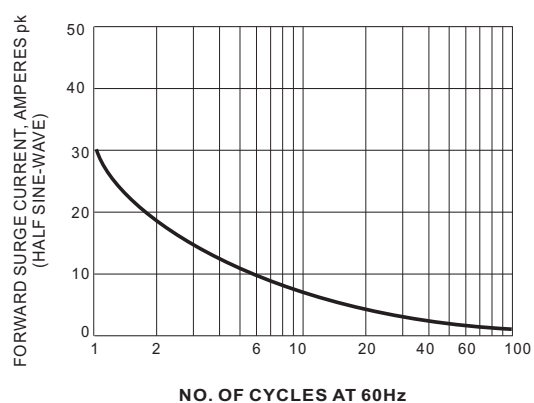


FIG.4 MAX NON-REPETITIVE SURGE CURRENT

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### Product and Packing Information

Part No.	Package Type	Packing Type	Marking
DI100	DIP	50pcs / Tube	DI100
DI101	DIP	50pcs / Tube	DI101
DI102	DIP	50pcs / Tube	DI102
DI104	DIP	50pcs / Tube	DI104
DI106	DIP	50pcs / Tube	DI106
DI108	DIP	50pcs / Tube	DI108
DI1010	DIP	50pcs / Tube	DI1010

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