



# DATA SHEET

## DI100~DI1010

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

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.0 Amperes

**DIP** Unit : inch (mm)

 **Recognized File #E111753**

#### FEATURES

- Plastic material used carries Underwriters Laboratory recognition 94V-0
- Low leakage
- Surge overload rating-- 30 amperes peak
- Ideal for printed circuit board
- Exceeds environmental standards of MIL-S-19500/228
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### MECHANICAL DATA

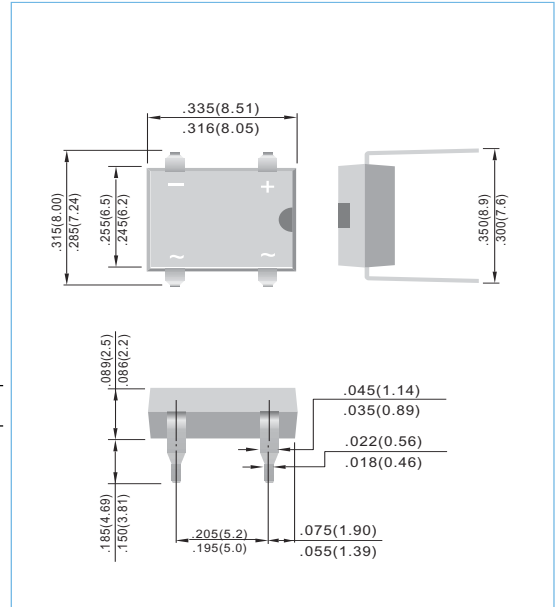
Case: Reliable low cost construction utilizing molded plastic technique results in inexpensive product

Terminals: Lead solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols molded or marking on body

Mounting Position: Any

Weight: 0.02 ounce, 0.4 gram



#### 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%

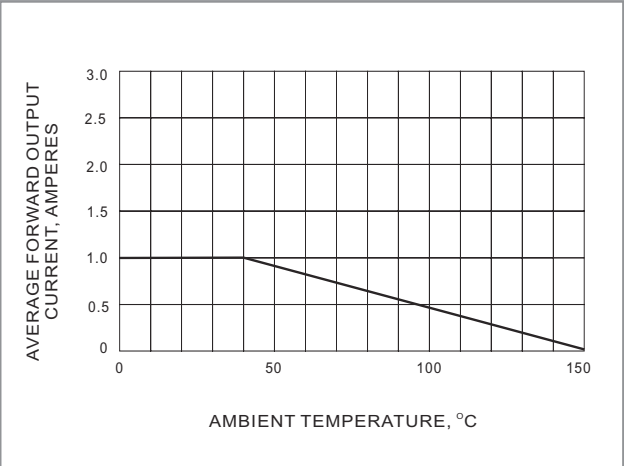
PARAMETER	SYMBOL	DI100	DI101	DI102	DI104	DI106	DI108	DI1010	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current T <sub>A</sub> =40°C	I <sub>AV</sub>	1.0							A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	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 1.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current T <sub>J</sub> =25 °C at Rated DC Blocking Voltage T <sub>J</sub> =125 °C	I <sub>R</sub>	5.0 500							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 Junstion and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

#### NOTES:

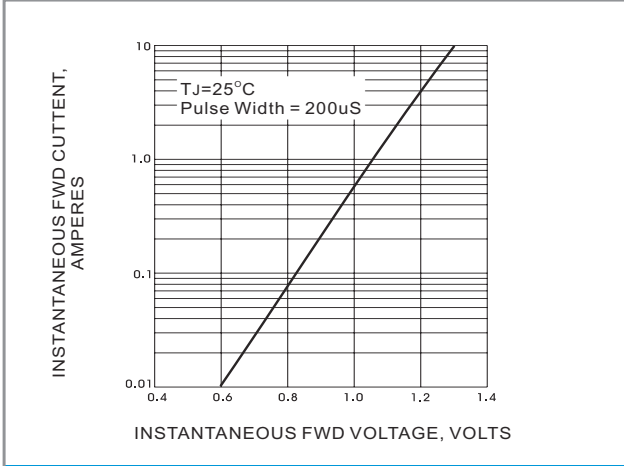
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 X 0.5"(13 X 13mm) copper pads



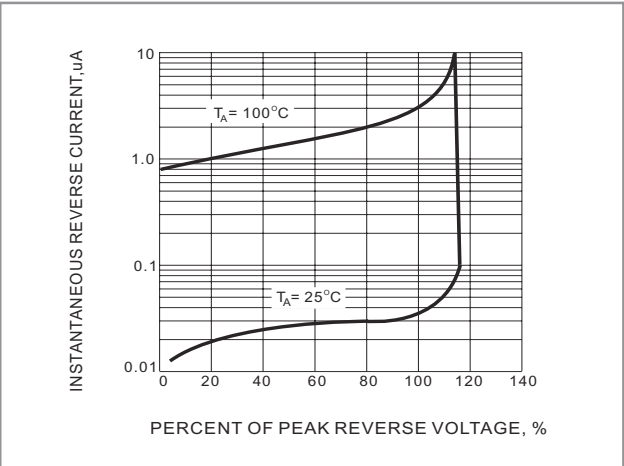
**RATING AND CHARACTERISTIC CURVES**



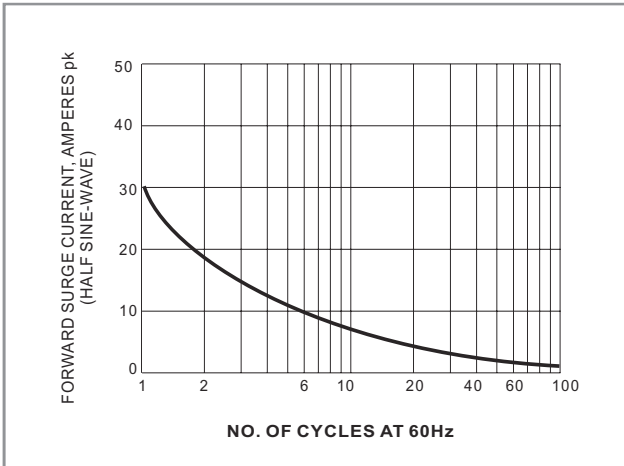
**FIG. 1 DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG. 2 TYPICAL FORWARD CHARACTERISTICS**



**FIG. 3 TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4 MAX NON-REPETITIVE SURGE CURRENT**

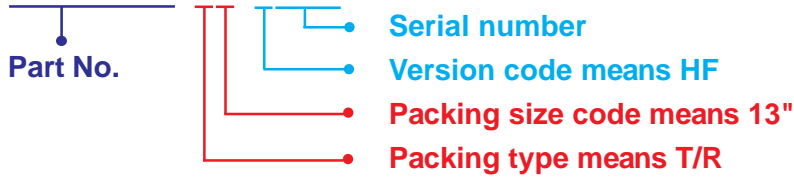


**Part No\_packing code\_Version**

DI100\_T0\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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