



DI100 SERIES

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



FEATURES

- Plastic material has Underwriters Laboratories flammability classification 94V-0
- Low leakage.
- Surge overload rating - 30 amperes peak.
- Ideal for printed circuit boards.
- Exceeds environmental standards of MIL - STD - 19500/228

MECHANICAL DATA

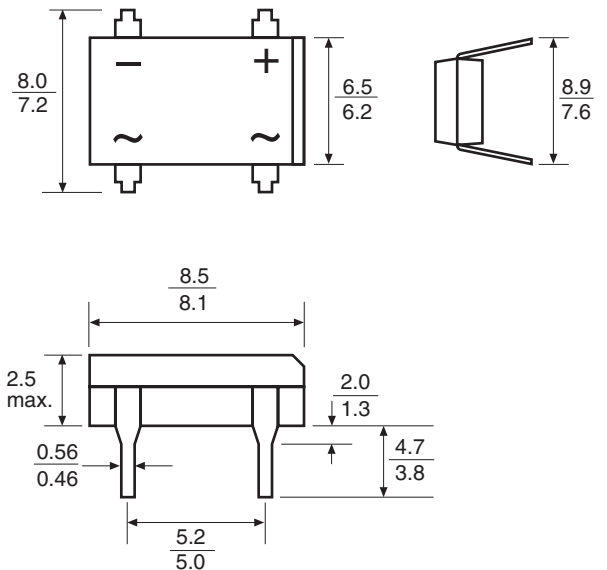
- Case** : Reliable low cost construction utilizing moulded plastic technique results in inexpensive product.
- Terminals** : Leads, solderable per MIL - STD - 202, Method 208.
- Polarity** : Polarity symbols printed on body.
- Weight** : 0.02 ounce, 0.4 grams.

VOLTAGE RANGE

50 to 1000 Volts PRV

CURRENT

1.0 Amperes



Dimensions in millimetres

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%.

		DI100	DI101	DI102	DI104	DI106	DI108	DI1010	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum Bridge Input Voltage RMS	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at T _A = 40°C (see Fig 2)	I _{F(AV)}	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine - wave superimposed on rated load (see Fig 1)	I _{FSM}	30.0							A
Rating for Fusing (t < 8.35 ms)	I ² t	10.0							A ² s
Maximum Forward Voltage Drop per Bridge Element at 1.0A (see Fig 3)	V _F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage per Element (see Fig 4) T _A = 25°C T _A = 125°C	I _R	5.0 0.5							μA mA
Operating Temperature Range	T _J	- 55 to + 125							°C
Storage Temperature Range	T _{STG}	- 55 to + 150							°C

RATING AND CHARACTERISTIC CURVES DI100 SERIES

FIG 1 : MAXIMUM NON-REPETITIVE SURGE CURRENT PER ELEMENT

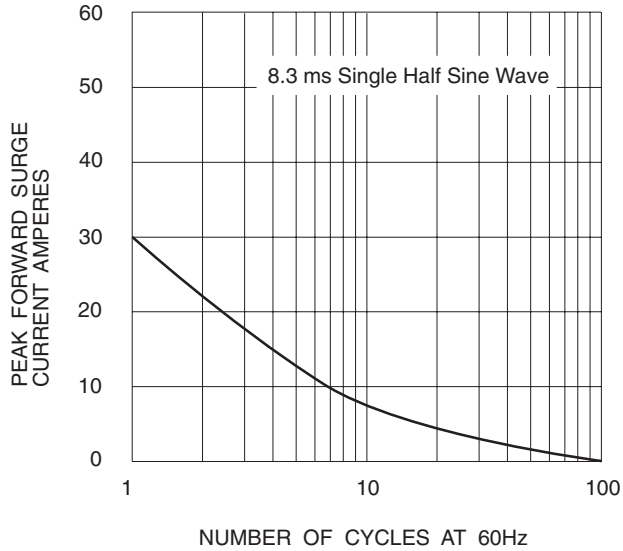


FIG. 2 : DERATING CURVE FOR RECTIFIED OUTPUT CURRENT

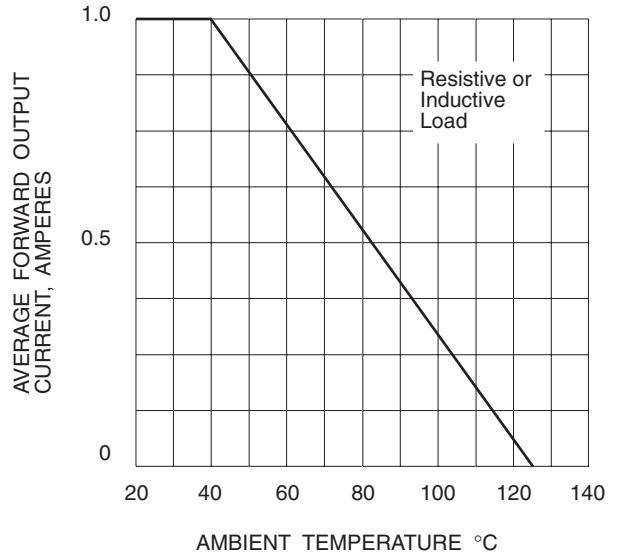


FIG 3 : TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

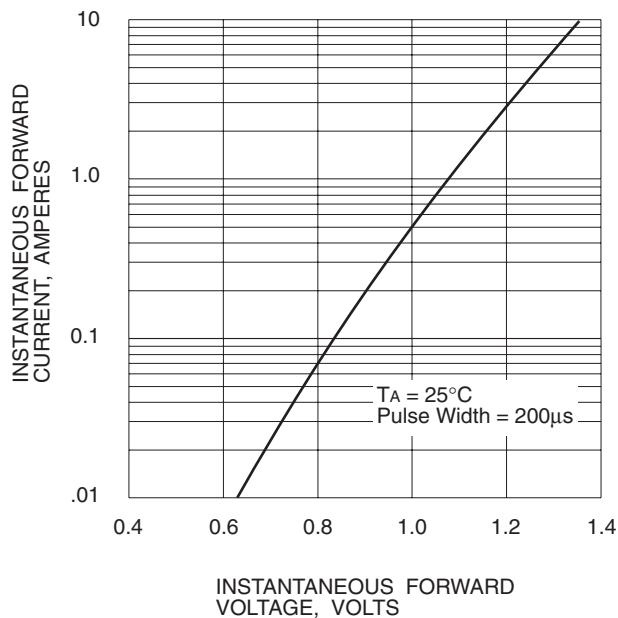


FIG 4 : TYPICAL REVERSE CHARACTERISTICS PER ELEMENT

