

Single Phase Bridge Rectifier



DI Series

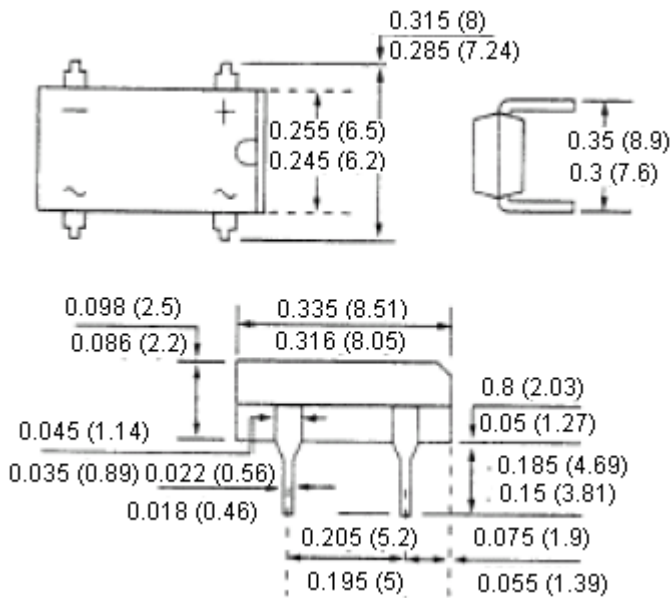


Features:

- 1 A - 1.5 A dual in line
- 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 moulded plastic technique results in inexpensive product
Terminals	: Lead solderable per MIL-STD-202, Method 208
Polarity	: Polarity symbols moulded or marking on body
Mounting Position	: Any
Weight	: 0.02 oz, 0.4 g



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%

	DI152	DI106	DI1510	Unit
Maximum Recurrent Peak Reverse Voltage	200	600	1,000	V
Maximum RMS Bridge Input Voltage	140	420	700	
Maximum DC Blocking Voltage	200	600	1,000	
I ² t Rating for Fusing (t <8.35 ms)	10			A ² t
Maximum Forward Voltage Drop Per Bridge Element at 1 A	1.1			V
Maximum Reverse Current at Rated T _J = 25°C	5			µA
DC Blocking Voltage Per Element T _J = 125°C	0.5			mA
Typical Junction Capacitance Per leg (Note 1) C _J	25			pF
Typical Thermal Resistance Per leg (Note 2) RθJA	40			°C / W
Typical Thermal Resistance Per leg (Note 2) RθJL	15			
Operating Temperature Range T _J	55 to +125			°C
Storage Temperature Range T _A	-55 to +150			

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4 V
2. Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.5 × 0.5 inches (13 × 13 mm) copper pads

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Rating and Characteristic Curves

Figure 1 - Maximum Non-Repetitive Surge Current

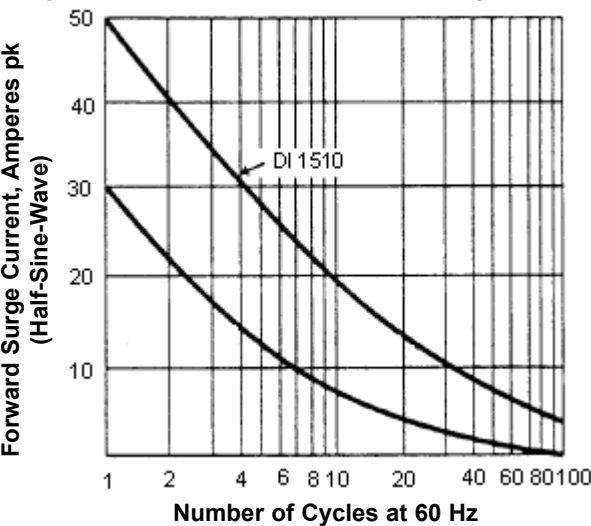


Figure 2 - Derating Curve For Output Rectified Current

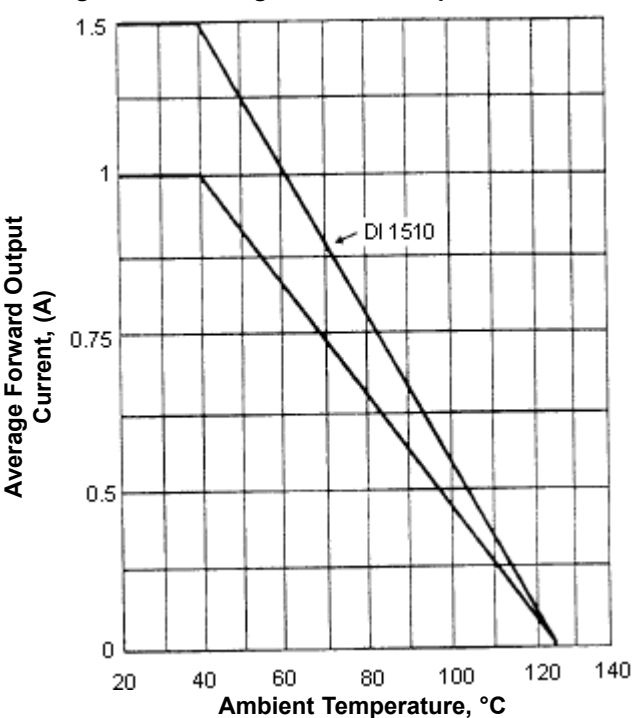


Figure 3 - Typical Forward Characteristics

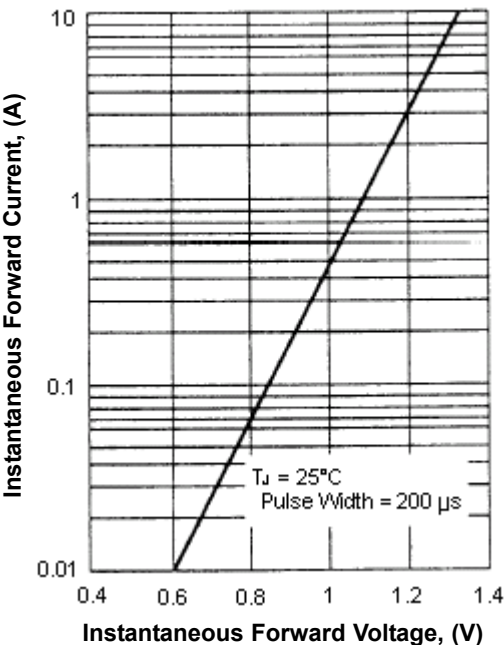
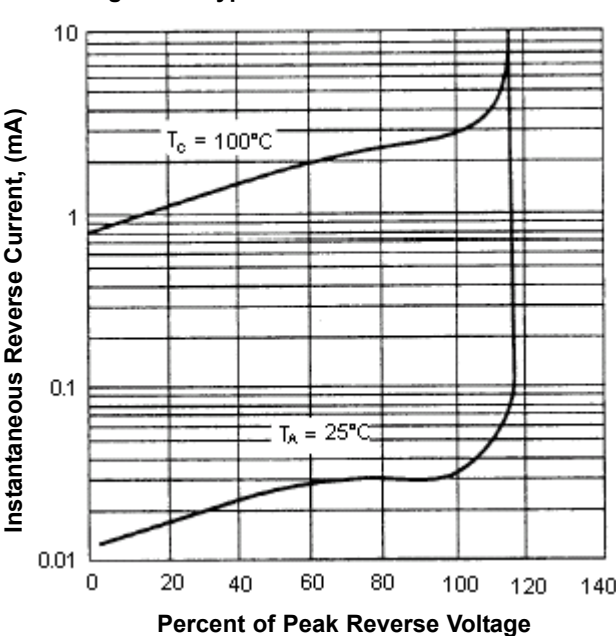


Figure 4 - Typical Reverse Characteristics



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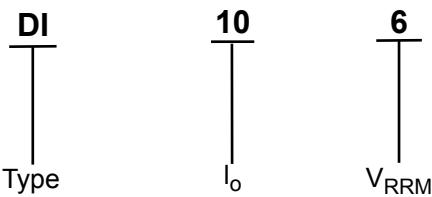


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Specification Table

V_{RRM} (V)	Maximum ac Input Voltage	I_o at 40°C (A)	I_{fsm} (A)	Order Multiple	Part Number
600	420	1	30	1	DI106
200	140	1.5	50	5	DI152
1,000	700				DI1510

Part Number Explanation:



- Type : DI
- I_o : 10 = 1 A and 15 = 1.5 A
- V_{RRM} : 2 = 200 V, 6 = 600 V and 10 = 1,000 V

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