# **BR15005S thru BR1510S**

## Silicon Bridge Rectifiers

## Reverse Voltage - 50 to 1000 Volts Forward Current - 15 Amperes

#### **Features**

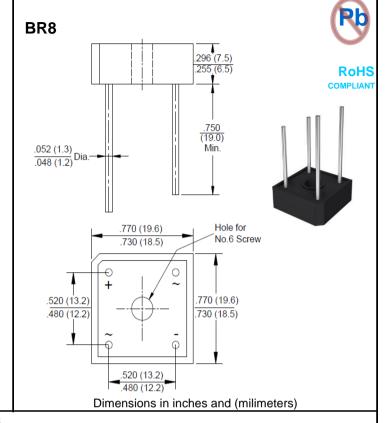
- Low forward voltage drop
- High surge forward current capability
- Small size, simple installation

#### **Mechanical Data**

- Polarity: Symbol marked on body
- Mounting position: Any

### **Applications**

 General purpose use in AC/DC bridge full wave rectification, for power supply, industrial automation applications, etc.



### **Maximum Ratings and Electrical Characteristics**

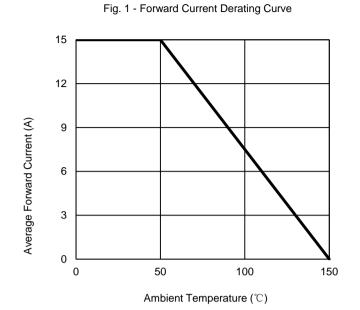
Rating at 25 ℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	BR	BR	BR	BR	BR	BR	BR	Unit
	Symbol	15005S	1501S	1502S	1504S	1506S	1508S	1510S	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum Average Forward	I(AV)	15.0							А
Rectified Output Current at TA=50°C	I(AV)								
Peak Forward Surge Current		IFSM 300							
8.3ms Single Half Sine-Wave	IFSM								Α
Super Imposed on Rated Load									
Maximum Forward Voltage Drop	VF	1.1							V
Per Bridge Element at 7.5A Peak	VF								
Maximum Reverse Current at Rated T <sub>J</sub> =25 °C	In.	10.0							μA
DC Blocking Voltage Per Element T <sub>J</sub> =100°C	lR	1.0							mA
Operating Temperature Range	TJ	-55 to +150							$^{\circ}$
Storage Temperature Range	Tstg	-55 to +150						$^{\circ}$	





350
300
8.3mS Single Half-Sine-Wave
(JEDEC METOD)
250
150
100
1 10 100
Number of Cycles at 60Hz

Fig. 2 - Maximum Non-Repetitive Surge Current

10

(My)

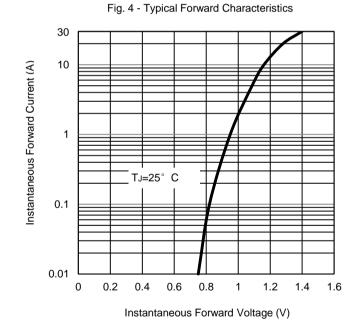
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TJ=25° C

TJ=25° C

50

Fig. 3 - Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

100

0.01



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