

Silicon Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 10 Amperes

Features

- Low forward voltage drop
- Electrically isolated base -2000 Volts
- High surge forward current capability
- Materials used carries U/L recognition

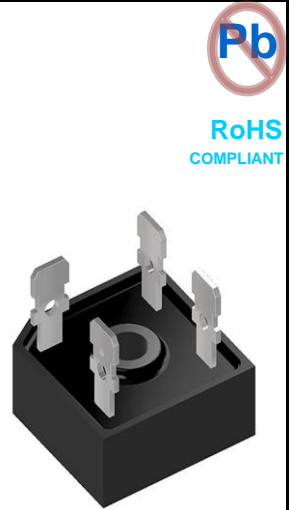
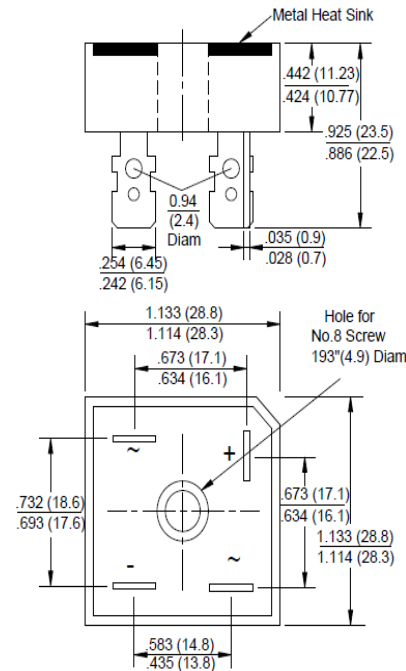
Mechanical Data

- 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.

BR



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Characteristics	Symbol	BR 10005	BR 1001	BR 1002	BR 1004	BR 1006	BR 1008	BR 1010	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @ $T_C=55^\circ C$	$I_{(AV)}$	10							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I_{FSM}	240							A
I^2t Rating for Fusing ($t < 8.3mS$)	I^2t	240							A^2s
Peak Forward Voltage per Diode at 5.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @ $T_J=25^\circ C$	I_R	10							μA
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

Fig. 1 - Forward Current Derating Curve

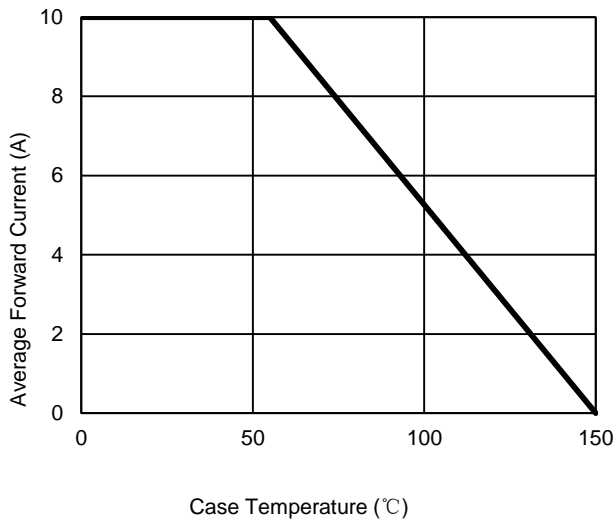


Fig. 2 - Maximum Non-Repetitive Surge Current

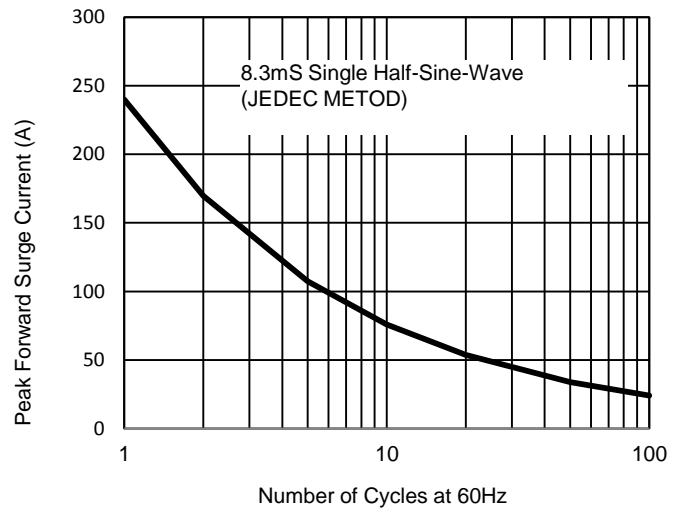


Fig. 3 - Typical Reverse Characteristics

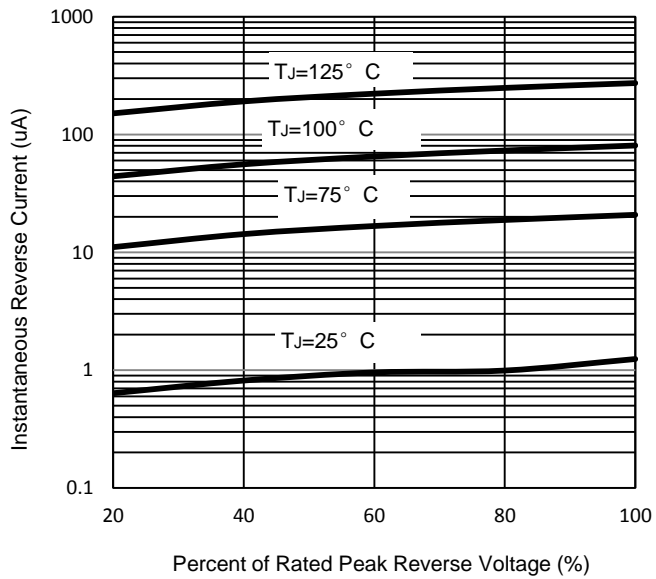
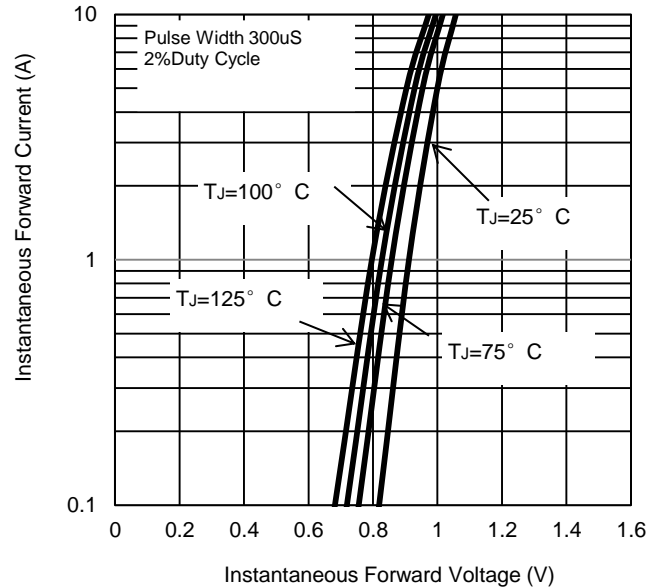


Fig. 4 - Typical Forward Characteristics





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