

**Silicon Bridge Rectifiers****Features**

- Low forward voltage drop
- High surge forward current capability
- Meet UL flammability classification 94V-0

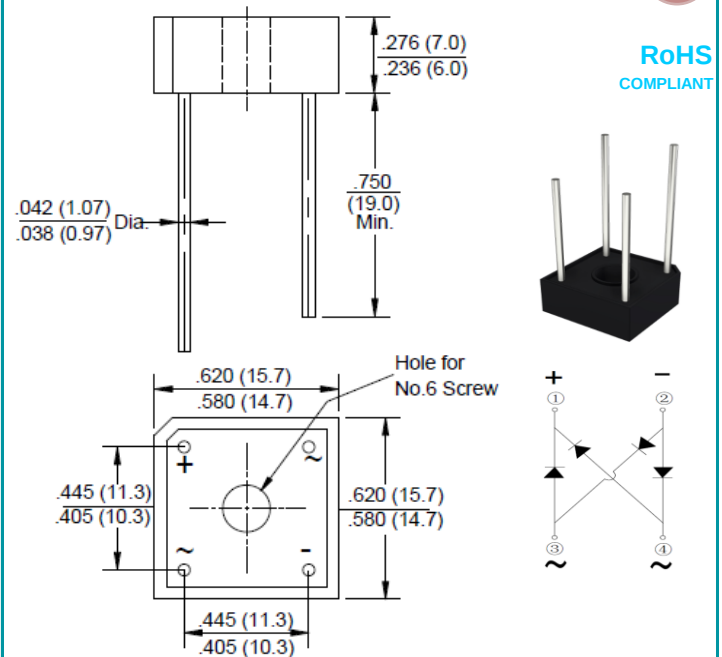
Mechanical Data

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

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

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

Reverse Voltage - 50 to 1000 Volts**Forward Current - 6.0 Amperes****BR6**

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	BR6005	BR601	BR602	BR604	BR606	BR608	BR610	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 _A =50 °C	I _(AV)	6.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	175							A
I ² t Rating for Fusing (t<8.3ms)	I ² t	127.1							A ² s
Peak Forward Voltage per Diode at 3A DC	V _F	1.0							V
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	10.0							μA
DC Blocking Voltage per Diode @T _J =100°C		1.0							mA
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

BR6*-B-00-00

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

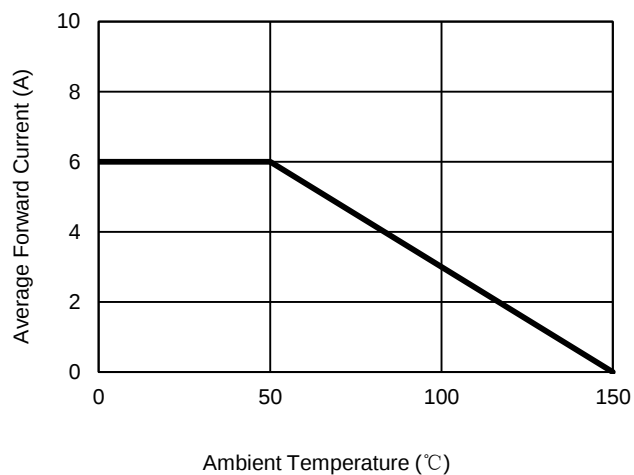


Fig. 2 - Maximum Non-Repetitive Surge Current

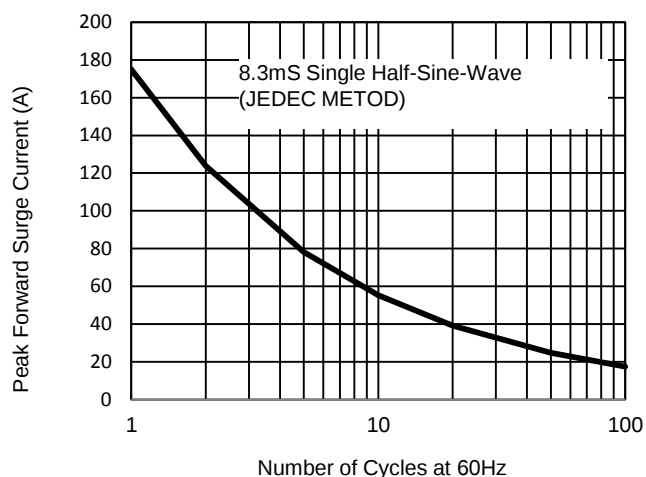


Fig. 3 - Typical Reverse Characteristics

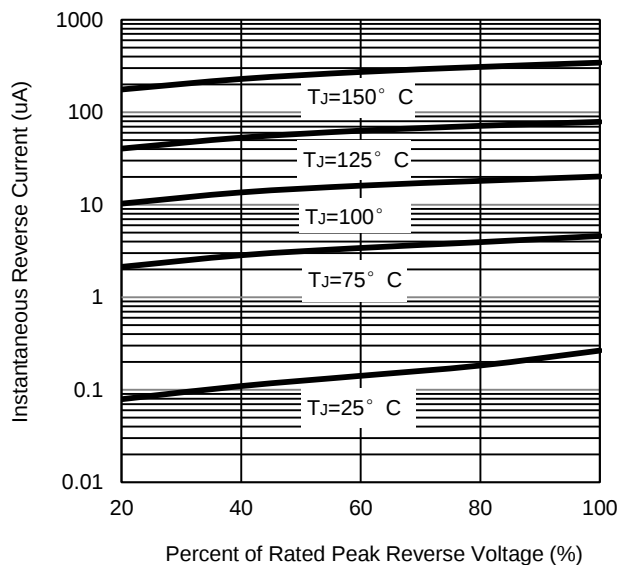
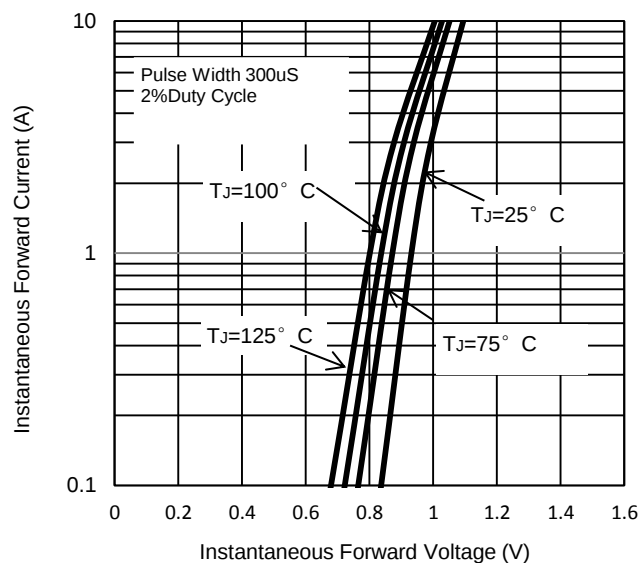


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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