



## Glass Passivated 3 Phase Bridge Rectifiers

Reverse Voltage - 50 to 1600Volts

Forward Current - 35 Amperes

### Features

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

### Mechanical Data

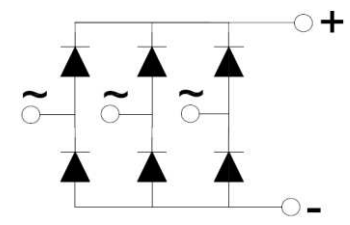
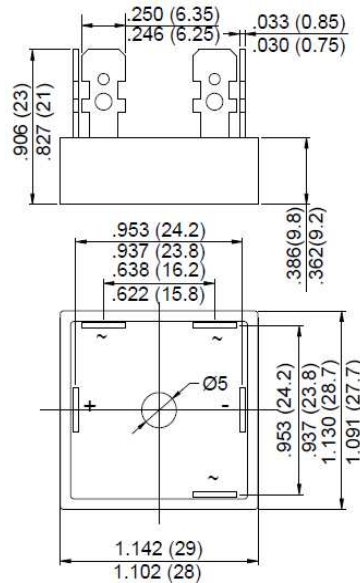
- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Mounting position:
- Bolt pass through the mounting hole of body then fix to heat sink
- Mounting torque: 2 N.m

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

### Applications

- For use in high power supply inverters, servo motor and welding machine applications

### SBRG



Package Outline Dimensions in Inches (Millimeters)



RoHS COMPLIANT

## 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	SBR35	SBR35	SBR35	SBR35	SBR35	SBR35	SBR35	SBR35	SBR35	SBR35	Unit
		-00G	-01G	-02G	-04G	-06G	-08G	-10G	-12G	-14G	-16G	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	840	980	1120	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	1200	1400	1600	V
Peak Non-Repetitive Reverse Voltage	V <sub>RSM</sub>	75	150	275	500	725	900	1100	1300	1500	1700	V
Maximum Average Forward Rectified Current @TC=55 °C	I <sub>(AV)</sub>	35										A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400										A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	840										A <sup>2</sup> S
Peak Forward Voltage per Diode at 17.5A DC	V <sub>F</sub>	1.1										V
Maximum DC Reverse Current at Rated @T <sub>J</sub> =25°C	I <sub>R</sub>	5										µA
DC Blocking Voltage per Diode @T <sub>J</sub> =150 °C		3										mA
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500										V
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150										°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +125										°C



Fig. 1 - Forward Current Derating Curve

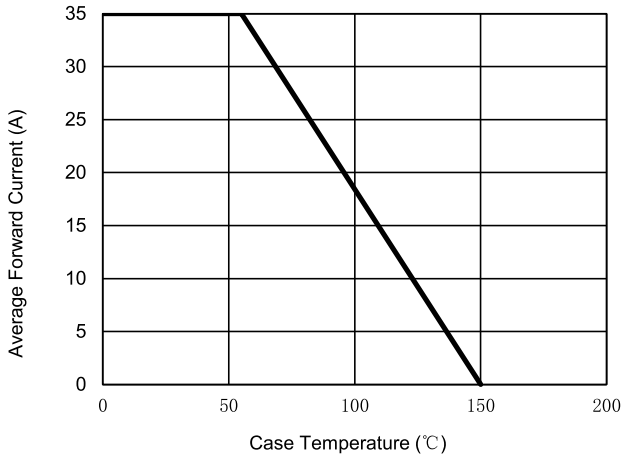


Fig. 2 - Maximum Non-Repetitive Surge Current

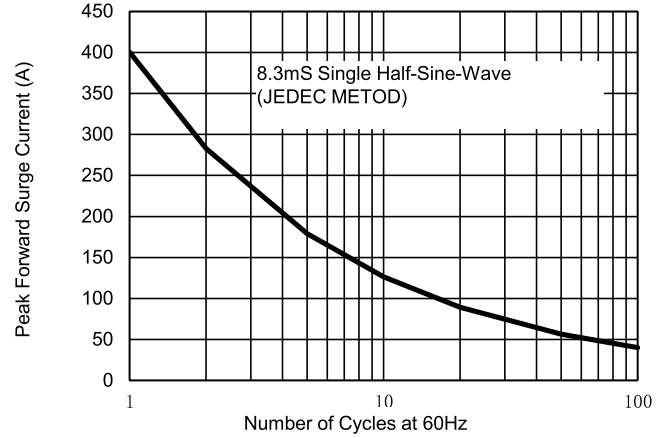


Fig. 3 - Typical Reverse Characteristics

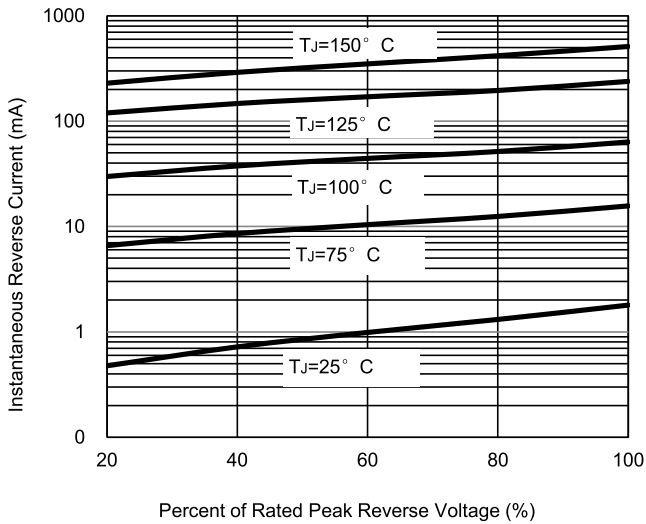
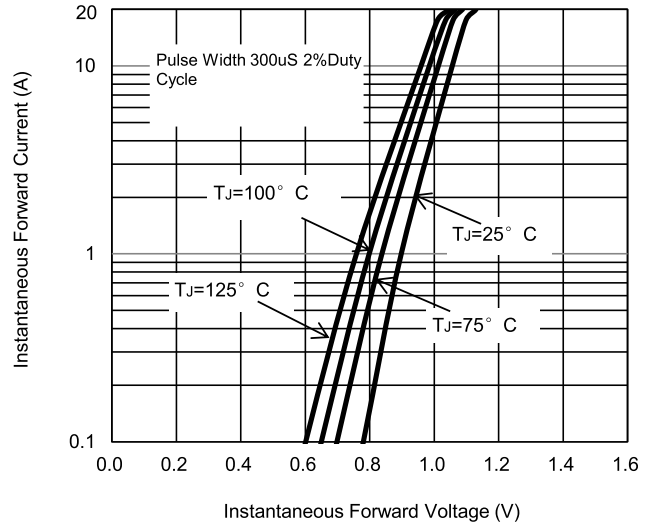


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



### Disclaimer

ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

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