

**Glass Passivated 3 Phase Bridge Rectifiers****Reverse Voltage - 50 to 1600Volts****Forward Current - 25 Amperes****Features**

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

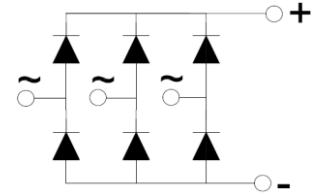
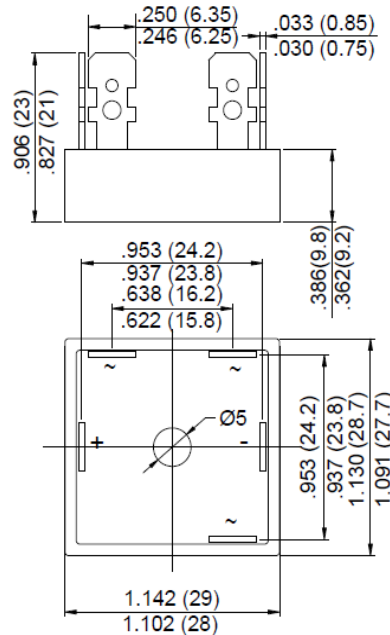
Mechanical Data

- 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**RoHS**
COMPLIANT

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	SBR25-00G	SBR25-01G	SBR25-02G	SBR25-04G	SBR25-06G	SBR25-08G	SBR25-10G	SBR25-12G	SBR25-14G	SBR25-16G	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	1400	1600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	840	980	1120	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	1200	1400	1600	V
Peak Non-Repetitive Reverse Voltage	V _{RSM}	75	150	275	500	725	900	1100	1300	1500	1700	V
Maximum Average Forward Rectified Current @TC=55 °C	I _(AV)	25										A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	320										A
I ² t Rating for Fusing (t<8.3ms)	I ² t	424										A ² S
Peak Forward Voltage per Diode at 12.5A DC	V _F	1.1										V
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5										μA
DC Blocking Voltage per Diode @T _J =150°C		3										mA
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500										V
Operating Junction Temperature Range	T _J	-55 to +150										°C
Storage Temperature Range	T _{STG}	-55 to +150										°C

SBR25*G-B-00/99/92-00/01

Rev. 11, 18-May-2020



Fig. 1 - Forward Current Derating Curve

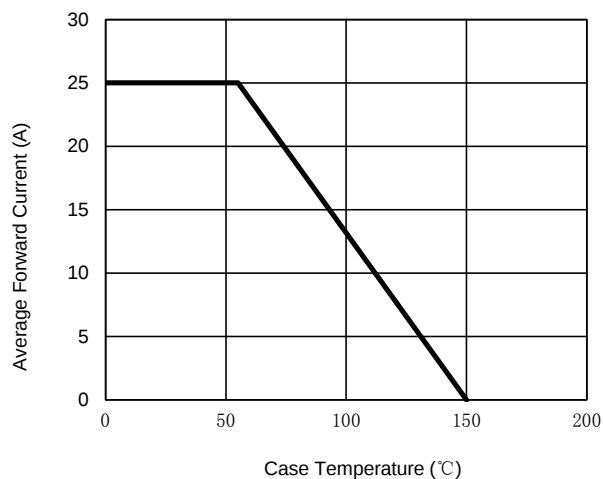


Fig. 2 - Maximum Non-Repetitive Surge Current

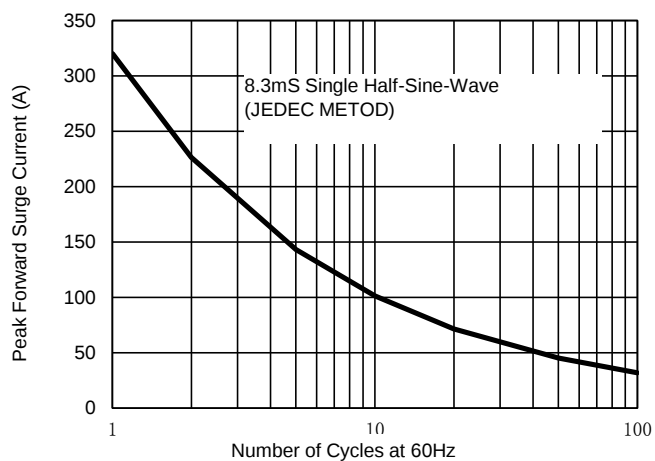


Fig. 3 - Typical Reverse Characteristics

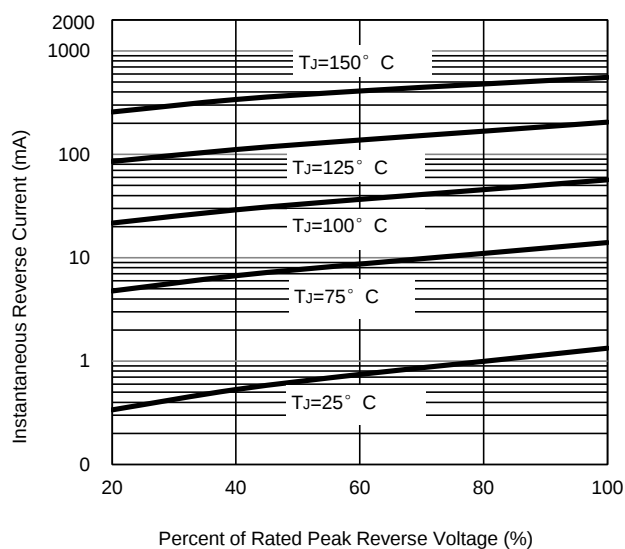
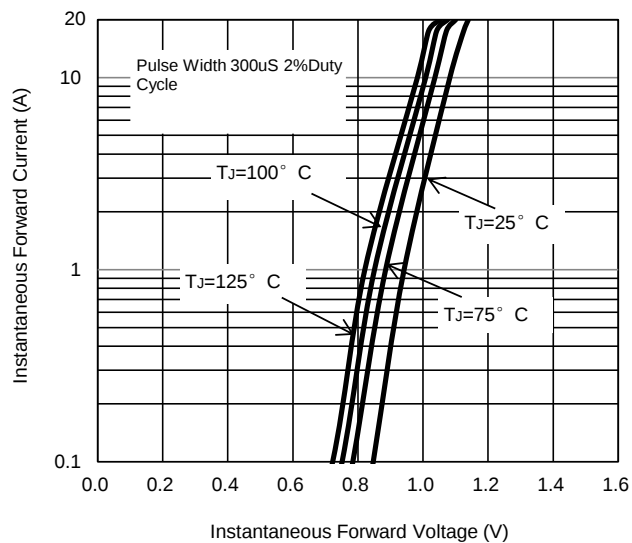


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.



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

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