## Glass Passivated 3 Phase Bridge Rectifiers

**Reverse Voltage - 1200Volts**

**Forward Current - 35 Amperes**

### Features

- Low forward voltage drop
- High current capability
- High reliability

### Mechanical Data

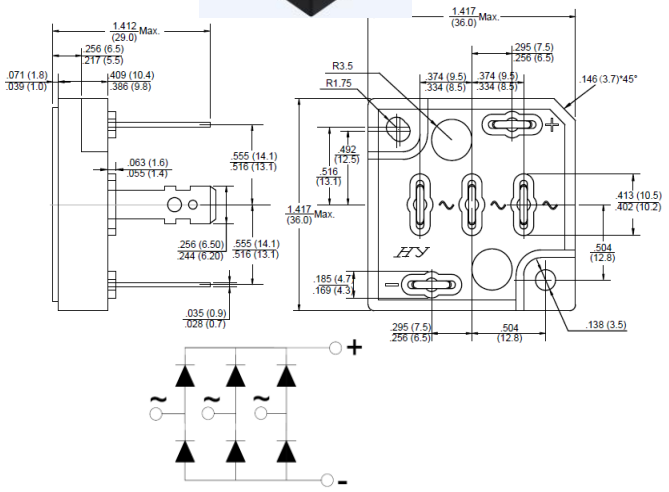
- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Mounting position:
- Bolt pass through the mounting hole of SBR35GW then fixto heat sink
- Mounting torque: 0.8 N.m

### Applications

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

**SCVB**

RoHS COMPLIANT




Package Outline Dimensions in Inches (Millimeters)

## 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 | SC35VB120 | Unit |
|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 1200 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 840 | V |
| Maximum Average Forward Rectified Current @$T_C$=55 ℃ | $I_{(AV)}$ | 35 | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 350 | A |
| $I^2t$ Rating for Fusing (t<8.3mS) | $I^2t$ | 508 | $A^2S$ |
| Peak Forward Voltage per Diode at 17.5A DC | $V_F$ | 1.1 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode @$T_J$=25℃ | $I_R$ | 10 | μA |
| Typical Thermal Resistance Junction to Case per Diode | $R_{\theta JC}$ | 0.7 | ℃/W |
| Dielectric Strength | Vdis | 2000 | V |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | ℃ |

Note: The typical data above is for reference only

SC35VB120-B-00/99-00/01

Rev. 9, 22-Apr-2019

Fig. 1 - Forward Current Derating Curve

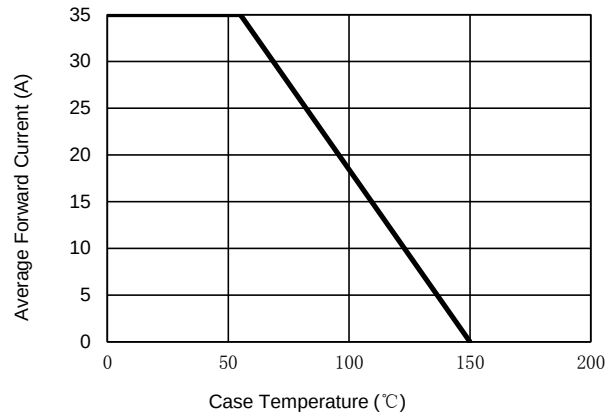



Fig. 2 - Maximum Non-Repetitive Surge Current

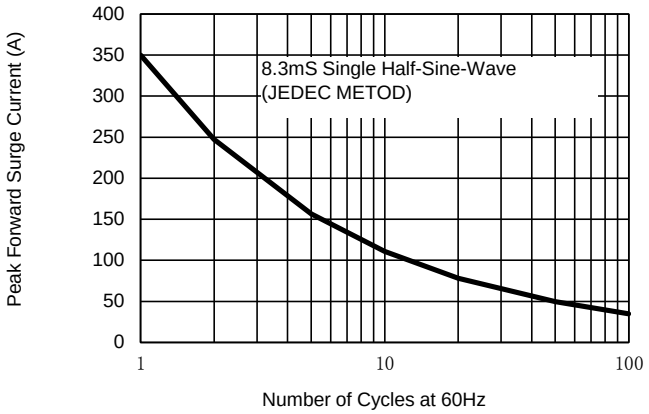



Fig. 3 - Typical Reverse Characteristics

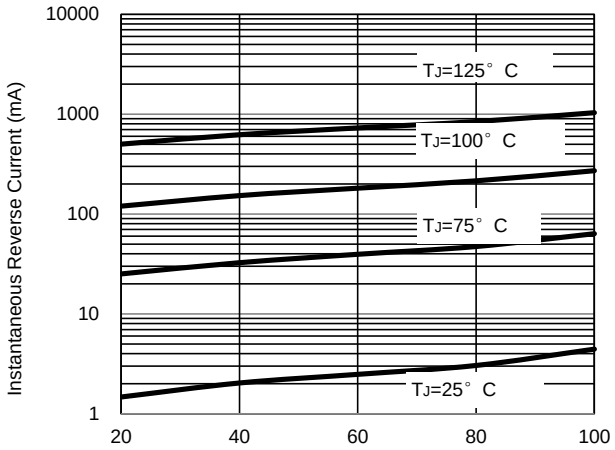
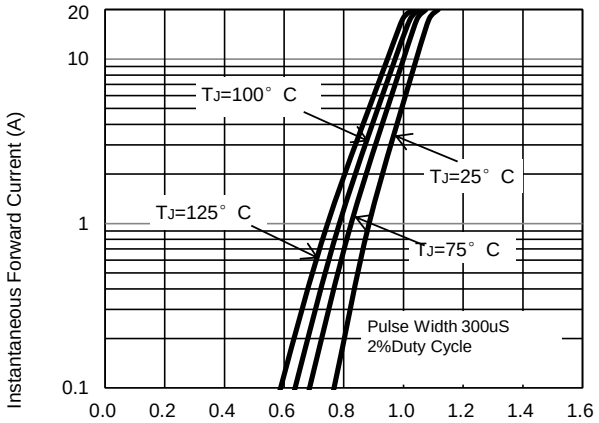



Fig. 4 - Typical Forward Characteristics




The curve above is for reference only.

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Rev. 2, 16-Mar-2017