

## Glass Passivated 3 Phase Bridge Rectifiers

**Reverse Voltage - 1600Volts**  
**Forward Current - 35 Amperes**

### Features

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

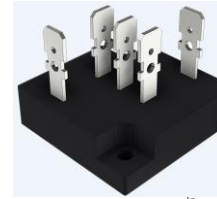
### Mechanical Data

- Case: Epoxy case with heat sink
- Polarity: Symbol marked on body
- Mounting position:
- Mounting torque: 0.8 N.m

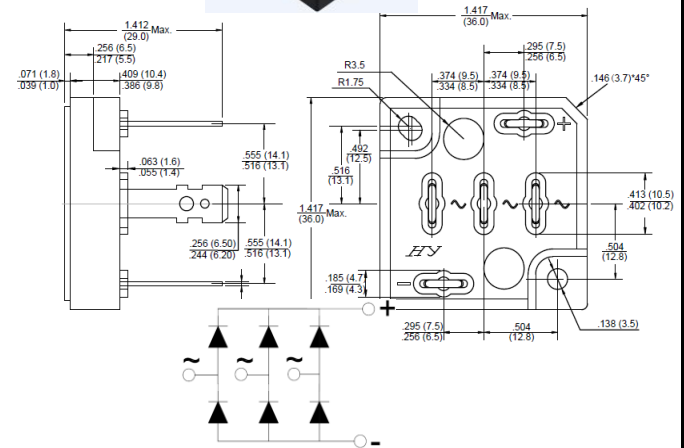
### Applications

- 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°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SC35VB160	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1600	V
Maximum RMS Voltage	V <sub>RMS</sub>	1120	V
Maximum Average Forward Rectified Current @T <sub>c</sub> =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>	350	A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	508	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 DC Blocking Voltage per Diode @T <sub>J</sub> =25°C	I <sub>R</sub>	100	μA
Typical Thermal Resistance Junction to Case per Diode	R <sub>θJC</sub>	0.7	°C/W
Dielectric Strength	V <sub>dis</sub>	2000	V
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

Note: The typical data above is for reference only

SC35VB160-B-00/99/92-00/01

Rev. 9, 22-Apr-2019

Fig. 1 - Forward Current Derating Curve

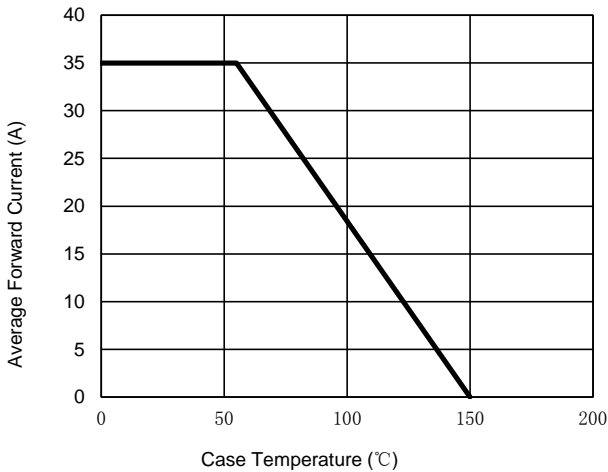


Fig. 2 - Maximum Non-Repetitive Surge Current

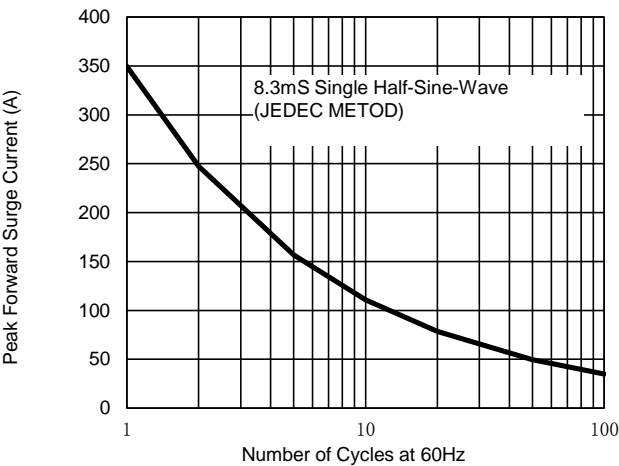


Fig. 3 - Typical Reverse Characteristics

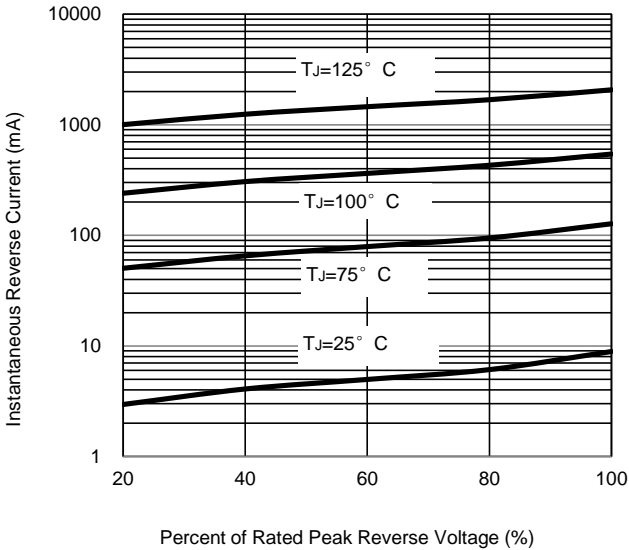
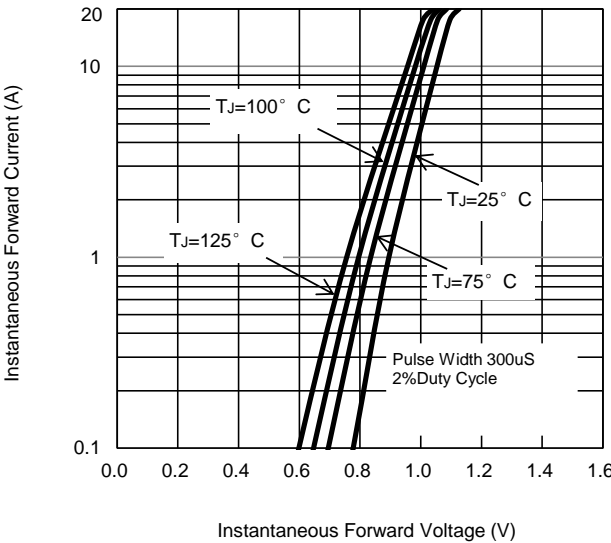


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only. .

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