

Glass Passivated Bridge Rectifiers

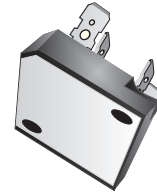


SC35VB80-G Thru. SC35VB160-G


Reverse Voltage: 800V and 1600V

Forward Current: 35A

RoHS Device

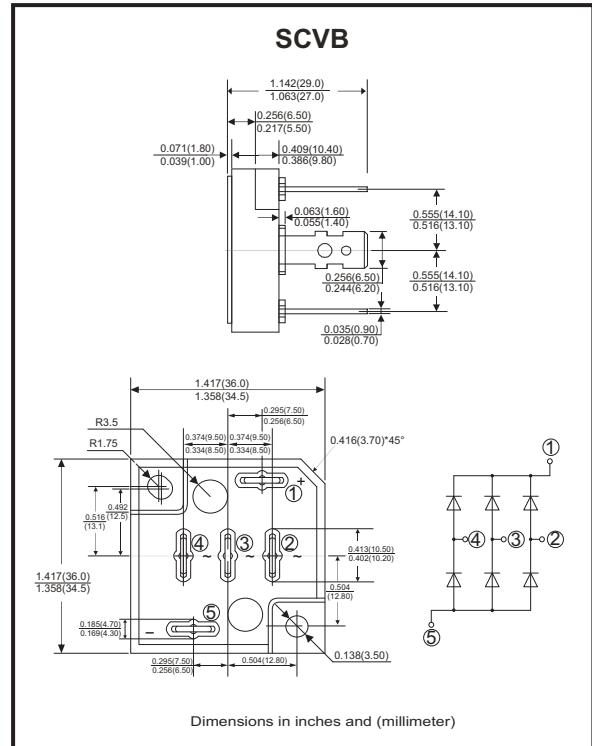


Features

- 3 phase bridge rectifiers.
- Surge overload -350 Amperes peak.
- Low forward voltage drop.
- UL recognized file # E349301 

Mechanical Data

- Polarity: As marked on Body.
- Mounting position: Any.
- Weight: 45 grams.



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%

| Parameter | Symbol | SC35VB80-G | SC35VB160-G | Unit |
|--|-----------------|-------------|-------------|----------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 800 | 1600 | V |
| Maximum RMS Bridge Input Voltage | V_{RMS} | 560 | 1120 | V |
| Maximum Average Forward Rectified Output Current @ $T_c=55^\circ\text{C}$ | $I_{(AV)}$ | 35 | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I_{FSM} | 350 | | A |
| Current Squared time ($1\text{ms} < t < 10\text{ms}$) | I^2t | 508 | | A^2s |
| Dielectric Strength | V_{dis} | 2000 | | V |
| Mounting Torque | TOR | 0.8 | | N.m |
| Maximum Forward Voltage Drop Per Element At 12.5A Peak | V_F | 1.05 | 1.1 | V |
| Maximum Reverse Current At Rated DC Blocking Voltage Per Element @ $T_A=25^\circ\text{C}$ | I_R | 10 | 100 | μA |
| Typical Thermal Resistance (Note 1) | $R_{\theta JC}$ | Max: 0.7 | | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | $^\circ\text{C}$ |

Notes: 1. Thermal Resistance Junction to case.

Company reserves the right to improve product design, functions and reliability without notice.

REV: E

Rating and Characteristics Curves (SC35VB80-G Thru. SC35VB160-G)

Fig.1 - Derating Curve Output Rectified Current

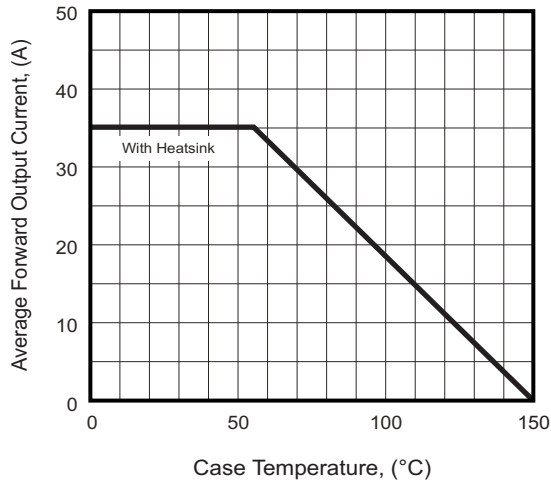


Fig.2 - Typical Forward Characteristics

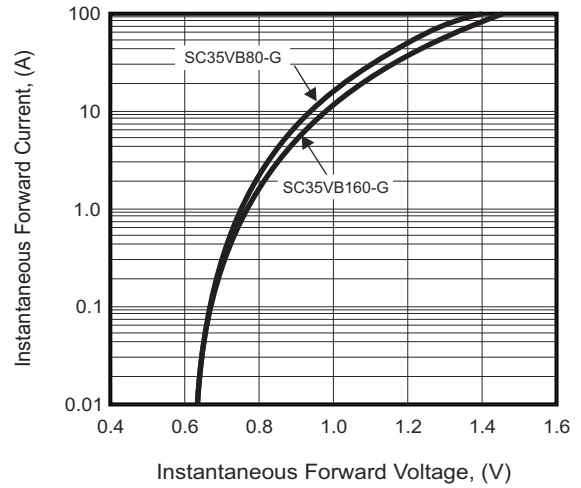


Fig.3 - Maximum Forward Surge Current

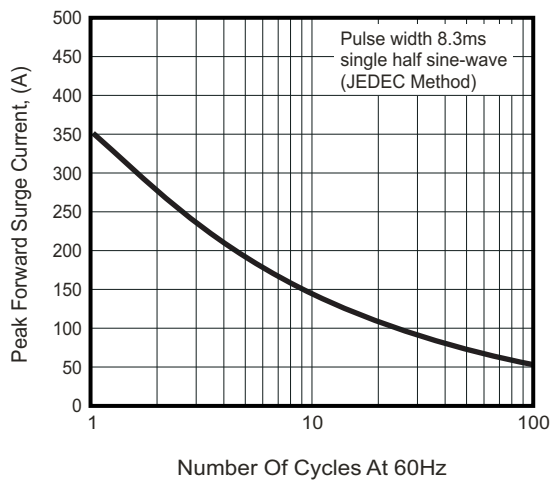
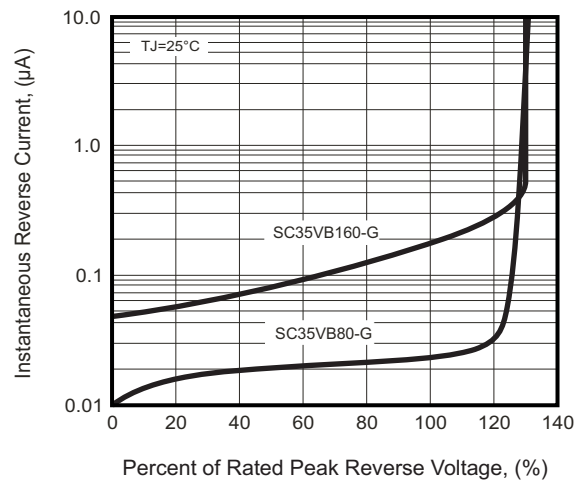
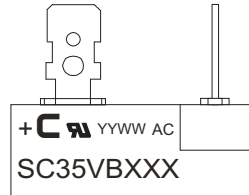


Fig.4 - Typical Reverse Characteristics



Marking Code

| Part Number | Marking code |
|-------------|--------------|
| SC35VB80-G | SC35VB80 |
| SC35VB160-G | SC35VB160 |



C = Compchip Logo

YY WW

↓ → Weeks of the year

↓ A.D. year latter two figures

XXX = Product type marking code

Standard Packaging

| Case Type | BULK PACK | |
|-----------|----------------|-------------------|
| | BOX (pcs) | CARTON (pcs) |
| SCVB | 25 | 100 |