

# Glass Passivated Bridge Rectifiers

**Comchip**  
SMD Diode Specialist

## SC35VB80S-G Thru. SC35VB160S-G

Reverse Voltage: 800V and 1600V

Forward Current: 35A

RoHS Device



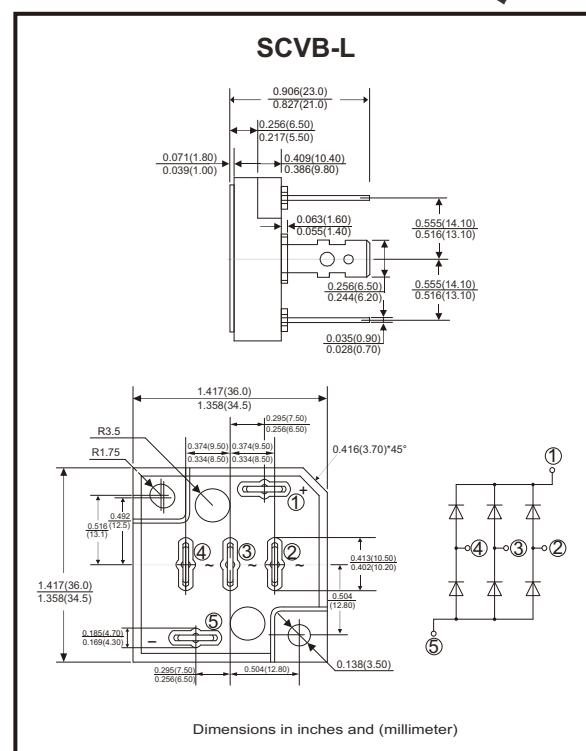
### Features

- 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 (approx.).



### 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	SC35VB80S-G	SC35VB160S-G	Unit
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	800	1600	V
Maximum RMS bridge input voltage	V <sub>RMS</sub>	560	1120	V
Maximum average forward rectified output 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
Current squared time (1ms < t < 10ms)	I <sup>2</sup> t	508		A <sup>2</sup> s
Dielectric strength	V <sub>dis</sub>	2000		V
Mounting torque	T <sub>OR</sub>	0.8		N.m
Maximum forward voltage drop per element at 12.5A peak	V <sub>F</sub>	1.05	1.1	V
Maximum reverse current at rated DC blocking voltage per element @T <sub>A</sub> =25°C	I <sub>R</sub>	10	100	µA
Typical thermal resistance (Note 1)	R <sub>θJC</sub>	Max: 0.7		°C/W
Operating temperature range	T <sub>J</sub>	-55 to +150		°C
Storage temperature range	T <sub>STG</sub>	-55 to +150		°C

Notes: 1.Thermal resistance junction to case.

REV:C

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Rating and Characteristics Curves (SC35VB80S-G Thru. SC35VB160S-G)

Fig.1 - Derating Curve Output Rectified Current

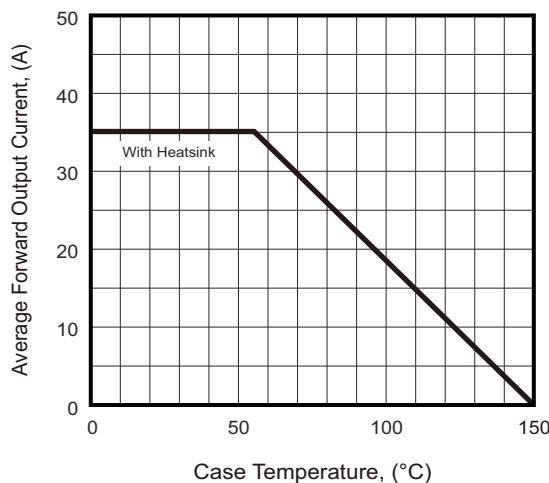


Fig.2 - Typical Forward Characteristics

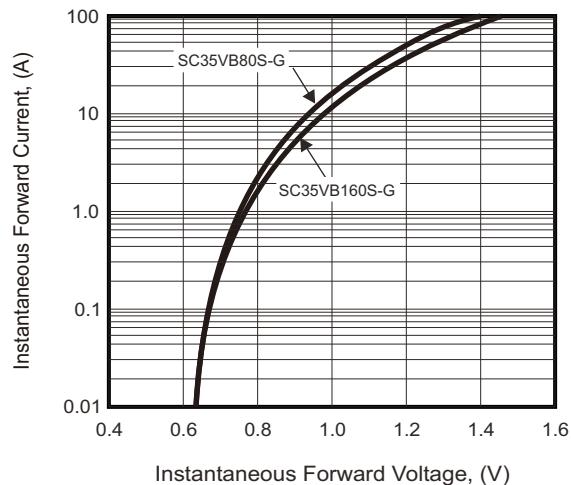


Fig.3 - Maximum Forward Surge Current

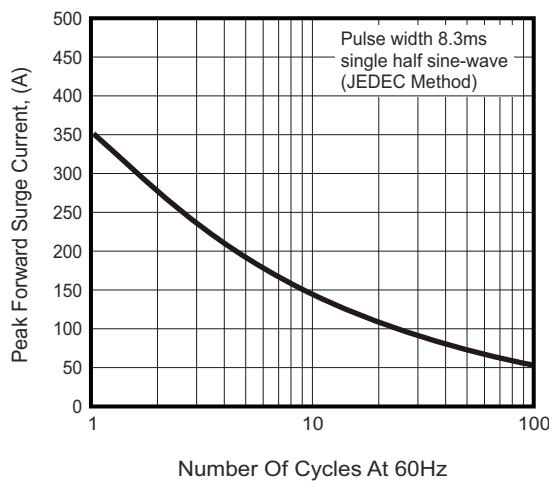
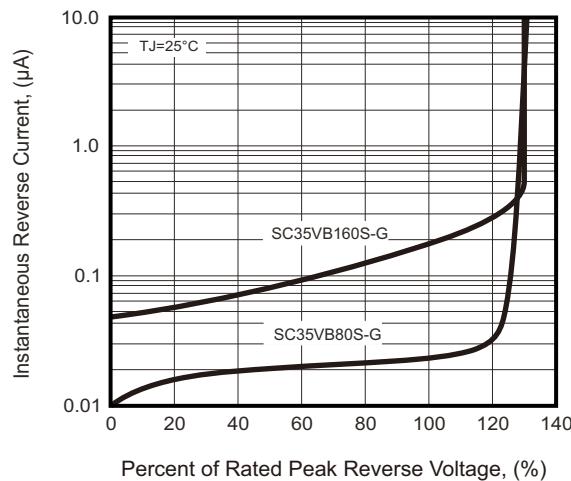
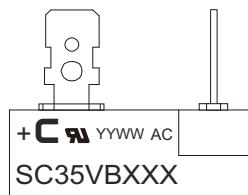


Fig.4 - Typical Reverse Characteristics



## Marking Code

Part Number	Marking code
SC35VB80S-G	SC35VB80
SC35VB160S-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-L	20	100