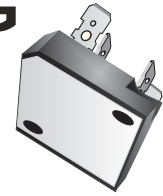


## SC35VB80S-G Thru. SC35VB160S-G

Reverse Voltage: 800V and 1600V

Forward Current: 35A

RoHS Device

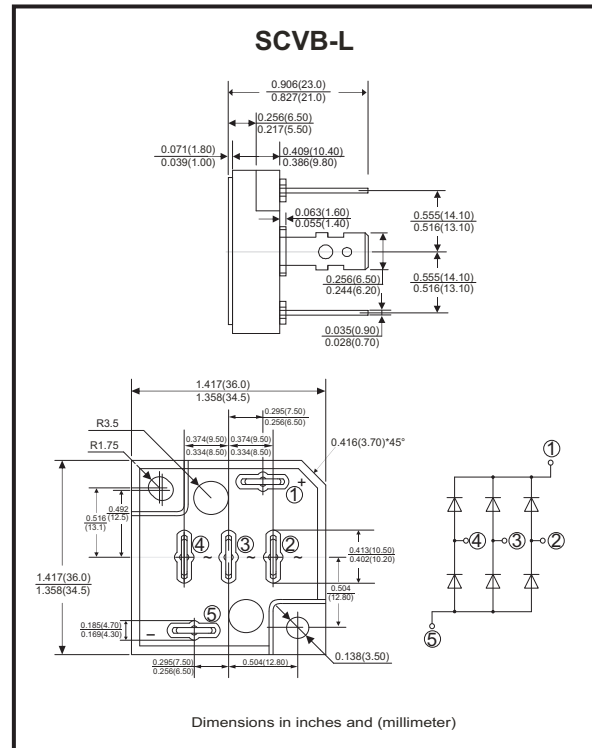


### Features

- 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.



### 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	$V_{RRM}$	800	1600	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	560	1120	V
Maximum Average Forward Rectified Output Current @ $T_c=55^\circ C$	$I_{(AV)}$	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 ( $1ms < t < 10ms$ )	$I^2 t$	508		$A^2 s$
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 @ $T_A=25^\circ C$	$I_R$	10	100	$\mu A$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	Max: 0.7		$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150		$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150		$^\circ C$

Notes: 1. Thermal Resistance Junction to case.

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

REV: B

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

Fig.1 - Derating Curve Output Rectified Current

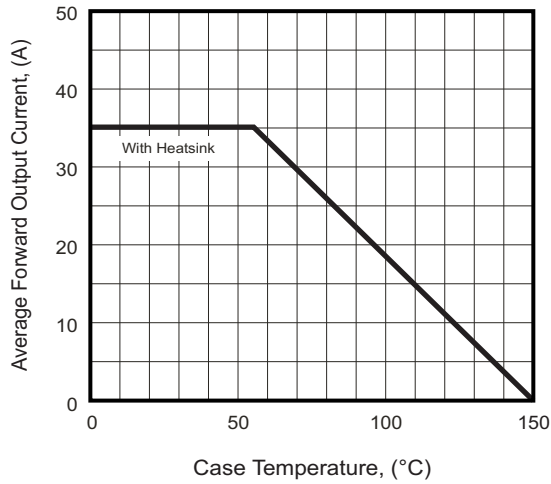


Fig.2 - Typical Forward Characteristics

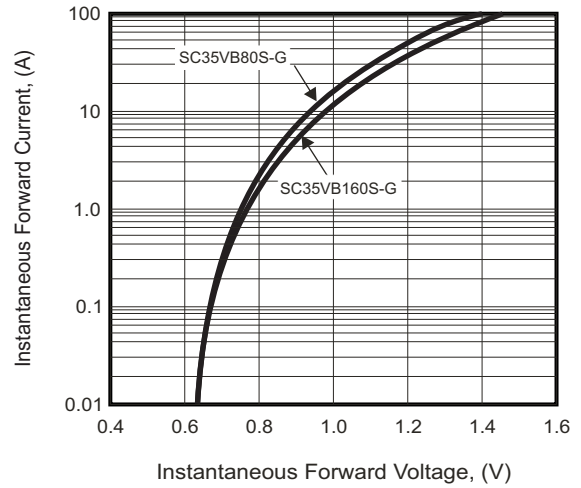


Fig.3 - Maximum Forward Surge Current

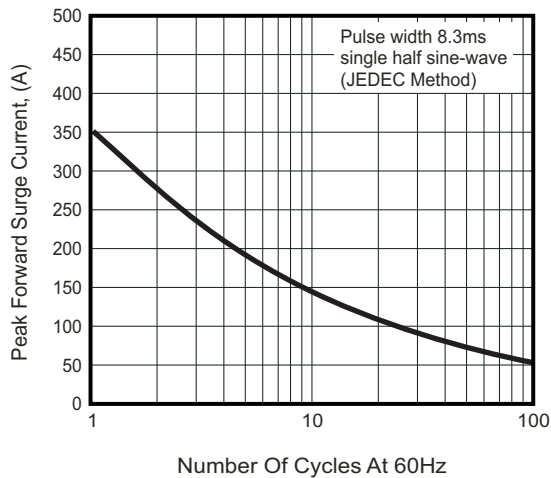


Fig.4 - Typical Reverse Characteristics

