



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Glass Passivated Bridge Rectifiers

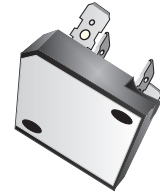


SC50VB80-G Thru. SC50VB160-G


Reverse Voltage: 800V and 1600V

Forward Current: 50A

RoHS Device

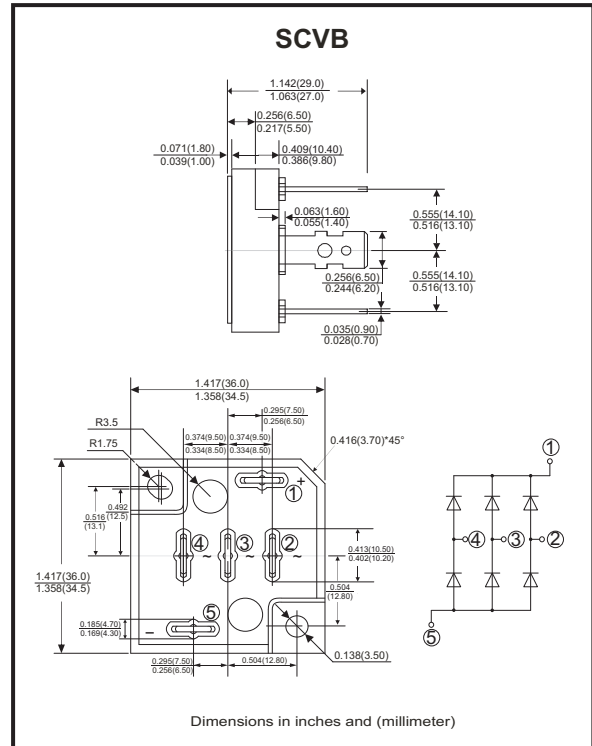


Features

- 3 phase bridge rectifiers.
- Surge overload -500 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	SC50VB80-G	SC50VB160-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 @ $T_c=55^\circ C$	$I_{(AV)}$	50		A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	500		A
Current Squared time ($1ms < t < 10ms$)	$I^2 t$	1037.5		$A^2 s$
Dielectric Strength	V_{dis}	2000		V
Mounting Torque	TOR	0.8		N.m
Maximum Forward Voltage Drop Per Element At 17.5A 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	μA
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: E

Rating and Characteristics Curves (SC50VB80-G Thru. SC50VB160-G)

Fig.1 - Derating Curve Output Rectified Current

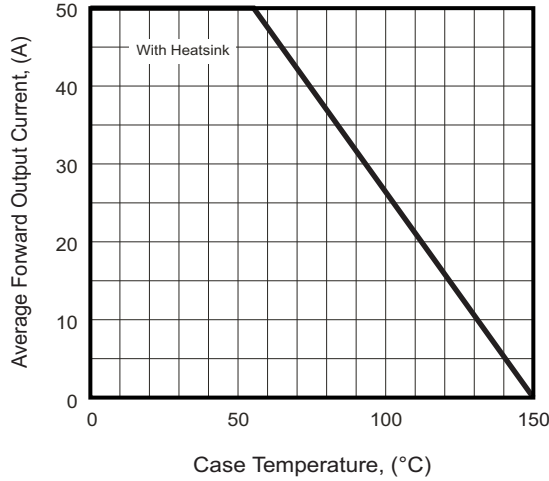


Fig.2 - Typical Forward Characteristics

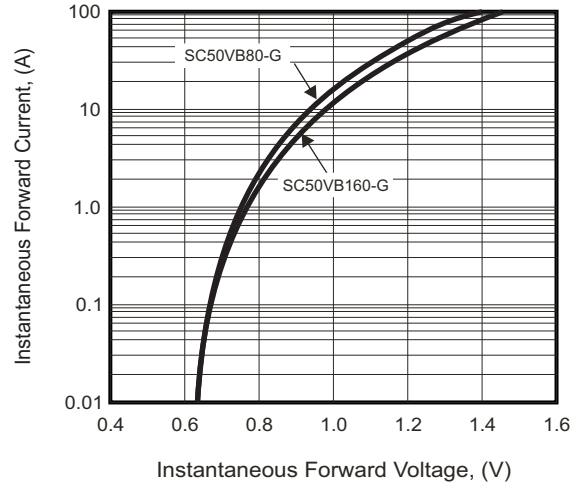


Fig.3 - Maximum Forward Surge Current

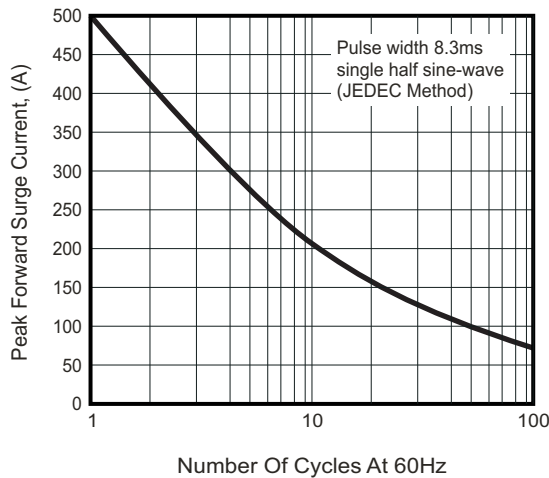
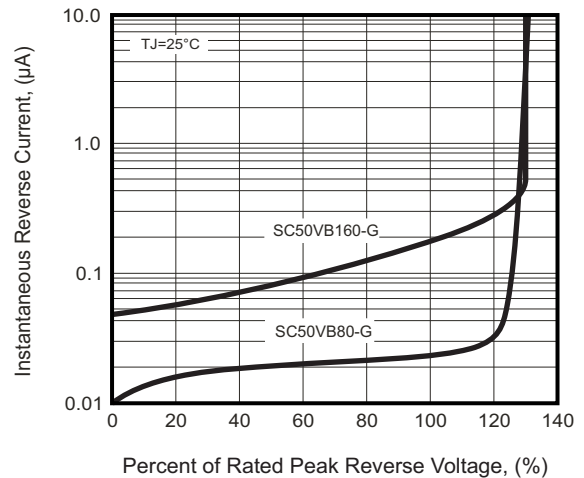
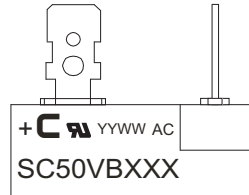


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
SC50VB80-G	SC50VB80
SC50VB160-G	SC50VB160



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