

Glass Passivated Bridge Rectifiers

Comchip
SMD Diode Specialist

SC50VB80-G

Reverse Voltage: 800V

Forward Current: 50A

RoHS Device

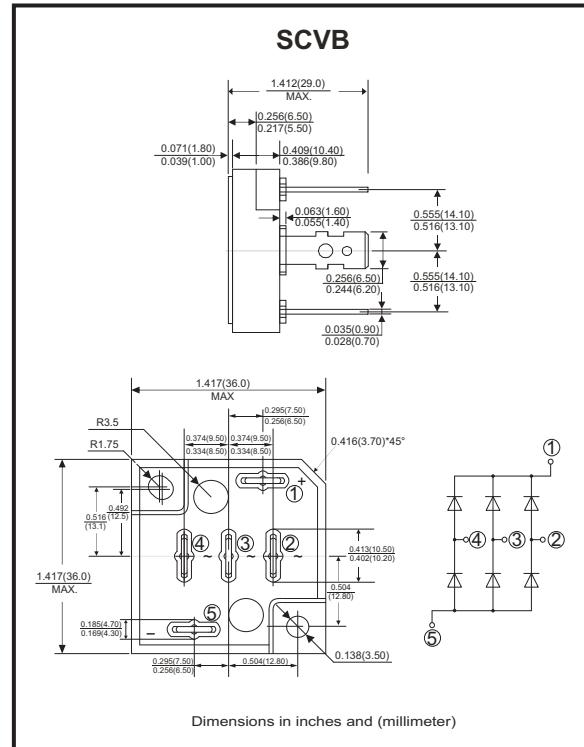


Features

- Surge overload-500 Amperes peak
- Low forward voltage drop
- Materials used carries U/L recognition

Mechanical Data

- Polarit: As marked on Body
- Mounting position: Any
- Weight: 46 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	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	800	V
Maximum RMS Bridge Input Voltage	V _{RMS}	560	V
Maximum Average Forward Rectified Output Current @T _c =55°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	500	A ² s
Dielectric Strength	V _{dis}	2000	V
Mounting Torque	T _{OR}	0.8	N.m
Maximum Forward Voltage Drop Per Element At 17.5A Peak	V _F	1.05	V
Maximum Reverse Current At Rated DC Blocking Voltage Per Element @T _A =25°C	I _R	10	µA
Typical Thermal Resistance (Note 1)	R _{θJA}	Max: 0.7	°C/W
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Notes:

1. Thermal Resistance Junction to case.

REV:B

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Rating and Characteristics Curves (SC50VB80-G)

Fig.1 - Dearing Current OutputRectified Current

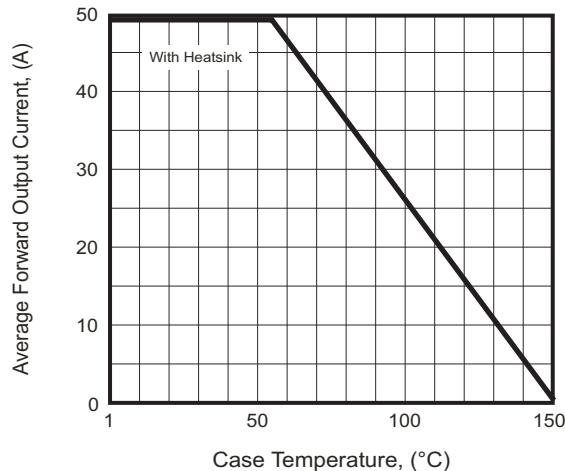


Fig.2 - Typical Forward Characteristics

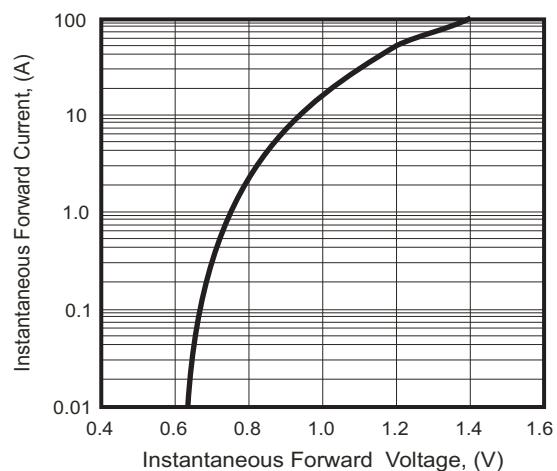


Fig.3 - Maximum Forward Surge Current

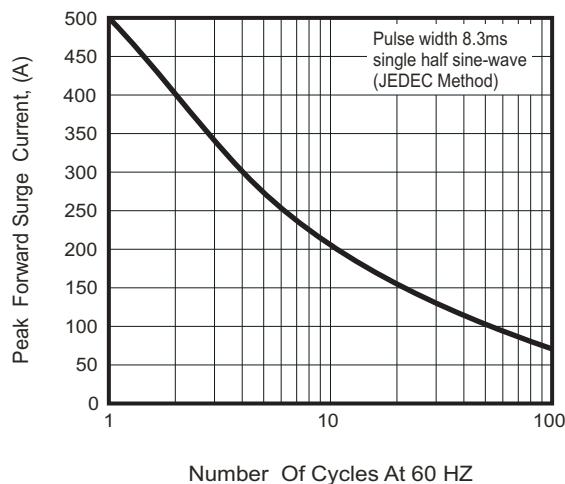
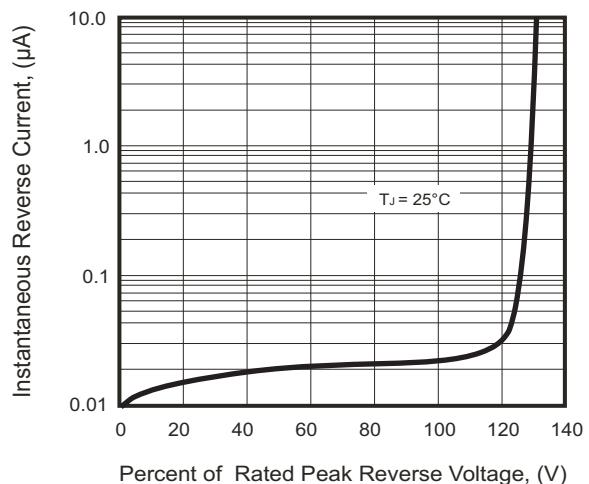
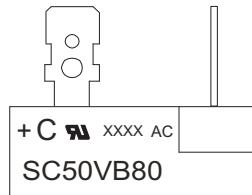


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
SC50VB80-G	SC50VB80



XX XX
↓ → Weeks of the year
A.D. year latter two figures
C = Comchip Logo

Standard Packaging

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