

## SC50VB160-G

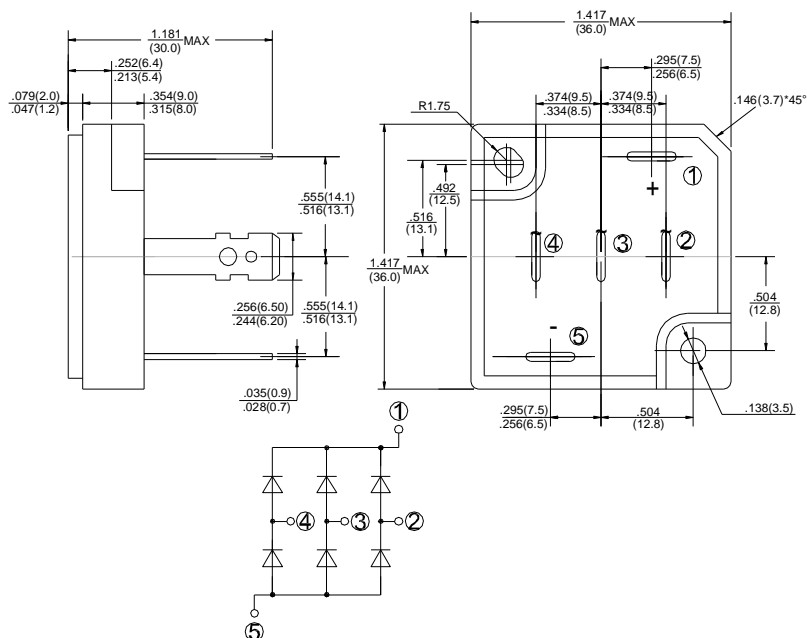
"-G" : RoHS Device

REVERSE VOLTAGE - **1600**Volts  
FORWARD CURRENT - **50**Amperes

### FEATURES

- Surge overload -500 amperes peak
- Low forward voltage drop
- Mounting position :Any
- Weight: 37g

### SCVB



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load 60Hz.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SC50VB160	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	1600	V
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	1120	V
Maximum Average Forward Rectified Output Current @ T <sub>C</sub> =55°C	I <sub>(AV)</sub>	50	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	500	A
Current Squared time (1ms < t < 10ms)	I <sup>2</sup> t	500	A <sup>2</sup> S
Dielectric Strength	V <sub>dis</sub>	2000	V
Mounting Torque	TOR	0.8	N.m
Maximum Forward Voltage Drop Per Element at 17.5A Peak	V <sub>F</sub>	1.1	V
Maximum Reverse Current at Rated DC Blocking Voltage Per Element @ T <sub>A</sub> =25°C	I <sub>R</sub>	100	µA
Typical Thermal Resistance (Note1)	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.

## RATINGS AND CHARACTERISTIC CURVES SC50VB160-G

FIG.1-MAXMUN FORWARD SURGE CURRENT

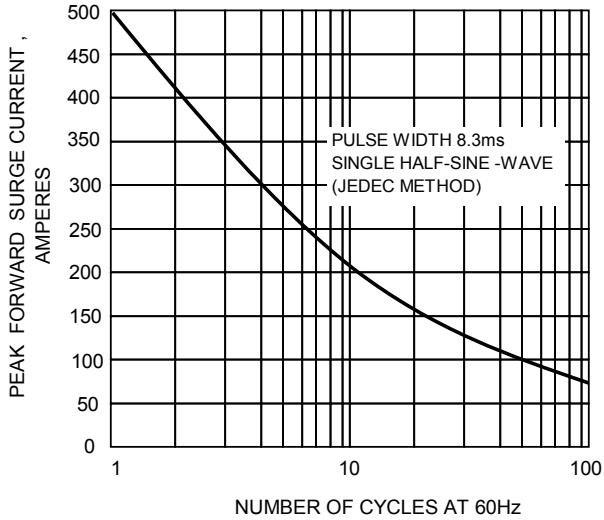


FIG.2- DERATING CURVE OUTPUT RECTIFIED CURRENT

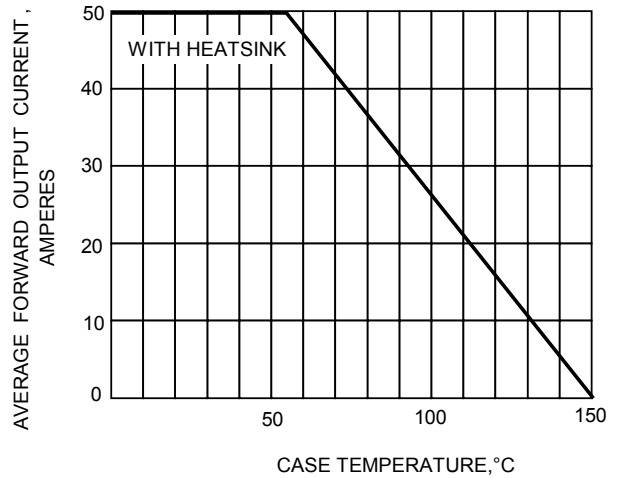


FIG.3-TYPICAL FORWARD CHARACTERISTICS

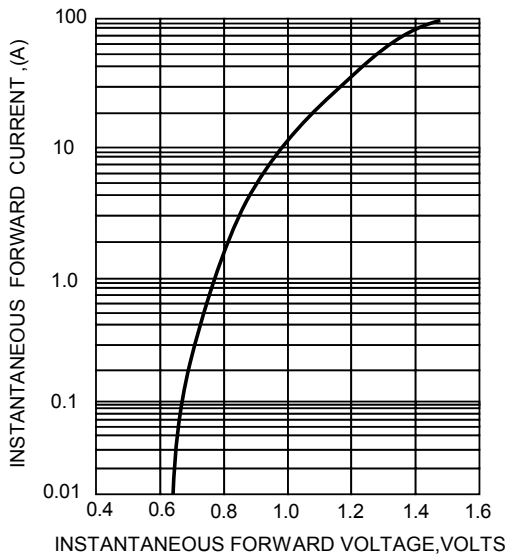


FIG.4-TYPICAL REVERSE CHARACTERISTICS

