# SBR50G SERIES

**GLASS PASSIVATED 3 PHASE BRIDGE RECTIFIERS**

REVERSE VOLTAGE - **50** to **1600** Volts

FORWARD CURRENT - **50** Ampreres

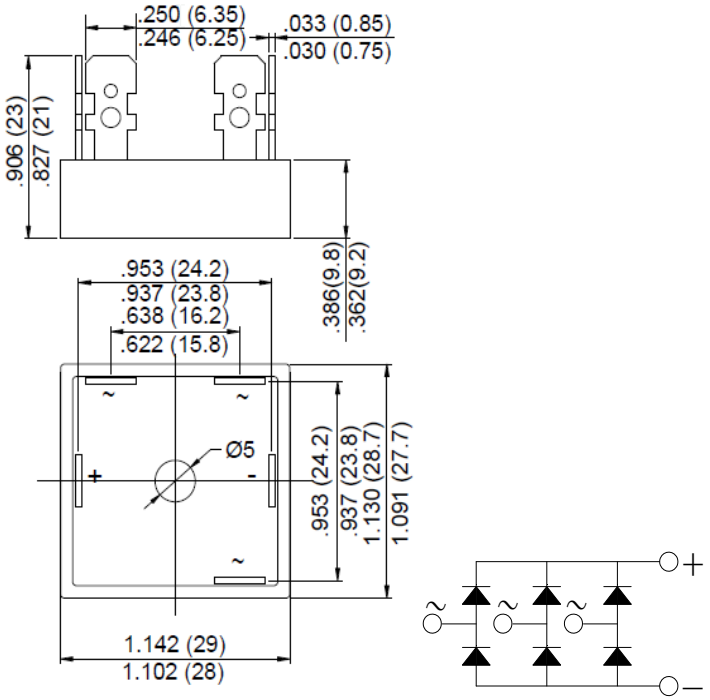
## FEATURES

- ●Low Forward Voltage Drop
- ●High Current Capability
- ●High Reliability
- ●High Surge Current Capability
- ●Ideal for Printed Circuit Boards

## MECHANICAL DATA

- ●Case:Epoxy Case with Heat Sink Interally Mounted in the Bridge Encapsulation
- ●Terminals:Plated Leads Soiderable per MIL-STD-202,Method 208
- ●Polarity:As Marked on Body
- ●Weight:21 grams(approx.)
- ●Mounting Position: Bolt Down on Heatsink With Silicone Thermal Compound Between Bridge and Mounting Surface for Maximum Heat Transfer Efficiency
- ●Mounting Torque:2 N · m

**SBRG**




Dimensions in inches and (milimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%

## VOLTAGE RATINGS

| CHARACTERISTICS | SYMBOL | SBR50G | | | | | | | | | | UNIT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | -00 | -01 | -02 | -04 | -06 | -08 | -10 | -12 | -14 | -16 | |
| Peak Repetitive Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | V |
| Peak Non-Repetitive Reverse Voltage | $V_{RSM}$ | 75 | 150 | 275 | 500 | 725 | 900 | 1100 | 1300 | 1500 | 1700 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | 840 | 980 | 1120 | V |
| Maximum Average Forward Rectified Current @$T_C$=80℃ | $I_O$ | 50 | | | | | | | | | | A |
| Peak Forward Surge Current t=8.3ms at 60HZ | $I_{FSM}$ | 450 | | | | | | | | | | A |
| I2t Rating for fusing | $I^2t$ | 840 | | | | | | | | | | $A^2S$ |
| Maximum Forward Voltage drop per element at 25A Peak | $V_F$ | 1.1 | | | | | | | | | | V |
| Reverse peak current $V_R=V_{RRM}$@$T_J$=25℃<br>$V_R=V_{RRM}$@$T_J$=150℃ | $I_R$ | 5<br>3 | | | | | | | | | | μA<br>mA |
| RMS Isolation Voltage from Case to Lead | $V_{ISO}$ | 2500 | | | | | | | | | | V |
| Operating Temperature Range | $T_J$ | -40 to +150 | | | | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -40 to +125 | | | | | | | | | | ℃ |

## RATING AND CHARACTERISTIC CURVES
## SBR50G SERIES

FIG.1- DERATING CURVE OUTPUT RECTIFIED CURRENT

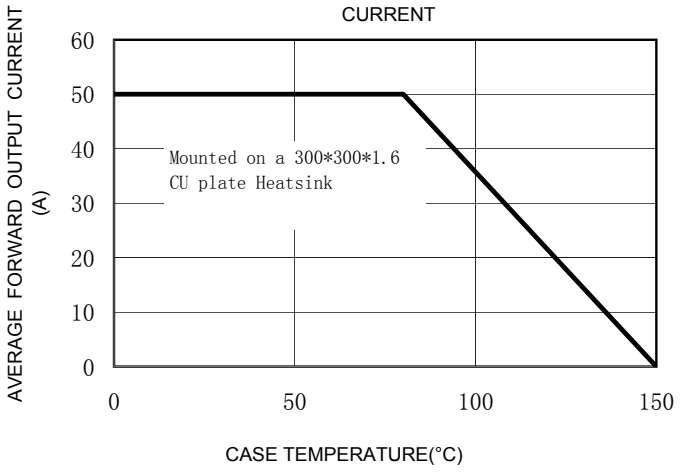



FIG.2-MAXIMUM FORWARD SURGE CURRENT

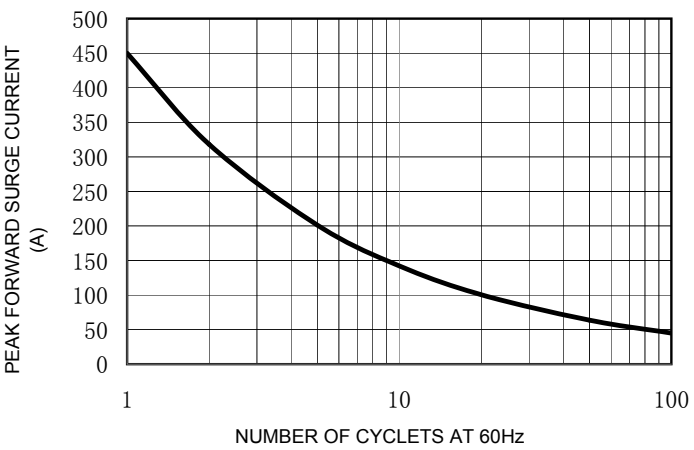



FIG.3-TYPICAL REVERSE CHARACTERISTICS

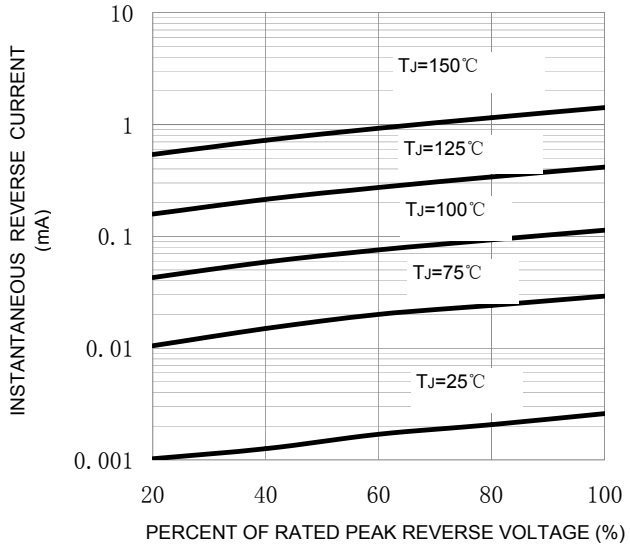
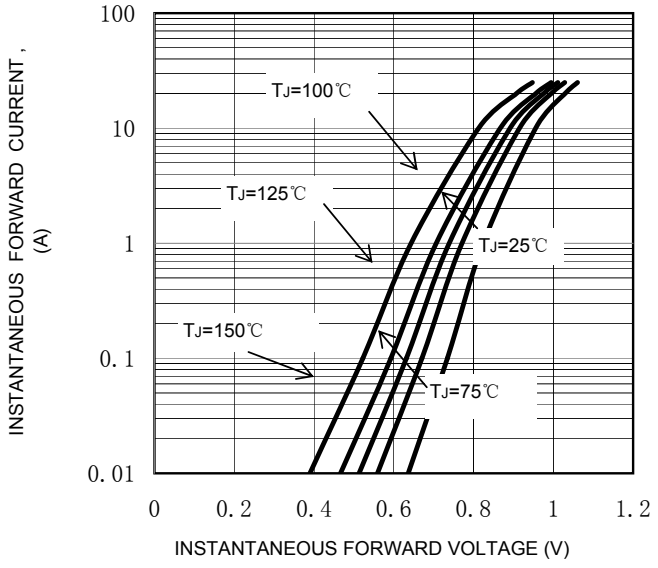



FIG.4-TYPICAL FORWARD CHARACTERISTICS




The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

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