# GSB22M-E-80C

## SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER

VOLTAGE: 1000V CURRENT: 2.2A

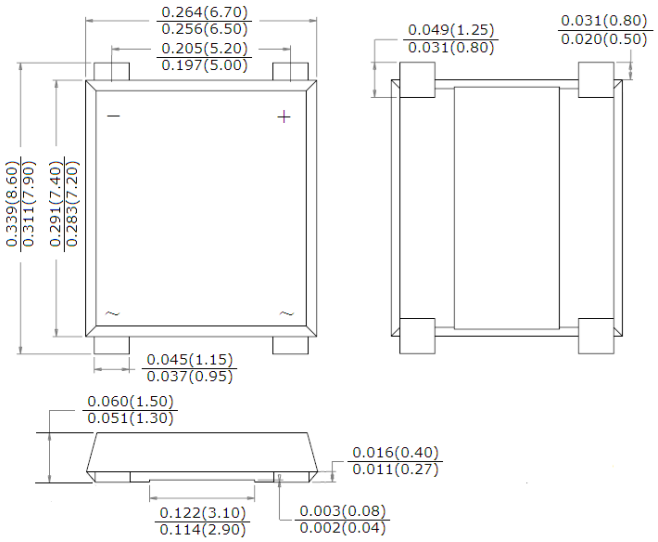
## FEATURE

Ideal for SMT manufacturing
Glass passivated chip
Compact, thin profile package design
Reliable low cost construction utilizing molded plastic technique
High surge current capability
High temperature soldering guaranteed: 260℃/10 seconds
This series is UL listed under Recognized Component Index, file number E481337
Halogen Free

## MECHANICAL DATA

Terminal: Plated leads solderable per J-STD-002
Case:UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: Polarity symbol marked on body
Marking: GB22M

**MSBL**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

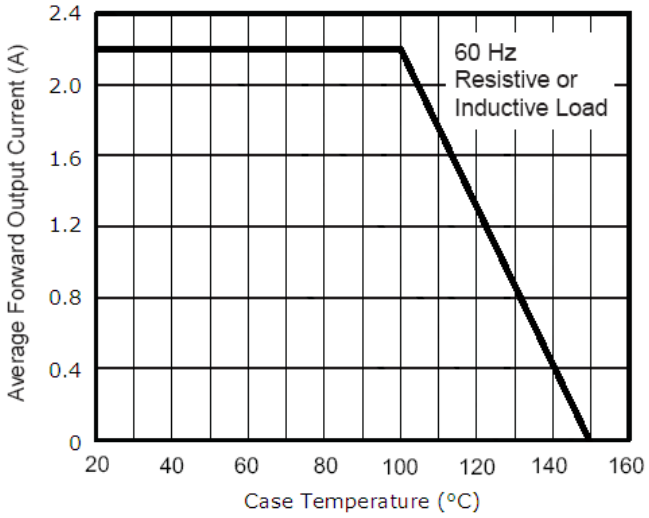
(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated)

| | Symbol | GSB22M-E-80C | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 1000 | V |
| Maximum RMS Voltage | Vrms | 700 | V |
| Maximum DC blocking Voltage | VDC | 1000 | V |
| Maximum average forward rectified output current | If(av) | 2.2 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 90 | A |
| Rating for fusing(t＜8.3ms) | $I^2t$ | 33.6 | $A^2sec$ |
| Maximum Instantaneous Forward Voltage at 1.1A | Vf | 1.02 | V |
| Maximum DC Reverse Current Ta =25℃<br>at rated DC blocking voltage Ta =125℃ | Ir | 5.0<br>100.0 | μA |
| Typical Thermal resistance Junction to case (Note 1) | Rth(jc) | 9.6 | ℃/W |
| Typical Junction Capacitance per element (Note 2) | Cj | 35 | pF |
| Storage and Operating Junction Temperature Range | Tstg, Tj | -55 to +150 | ℃ |

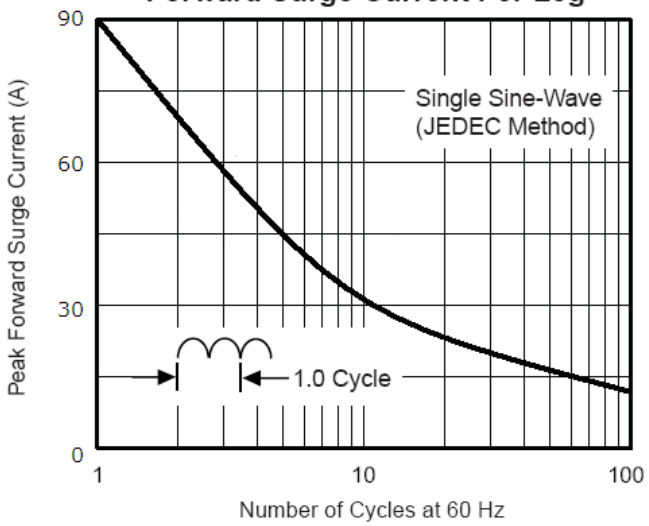
Note:
1. Unit mounted on glass-epoxy substrate with 1oz/ft2_20×20mm copper pad per pin with 1oz/ft2_20×20mm copper pad per pin
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

## RATINGS AND CHARACTERISTIC CURVES GSB22M-E-80C

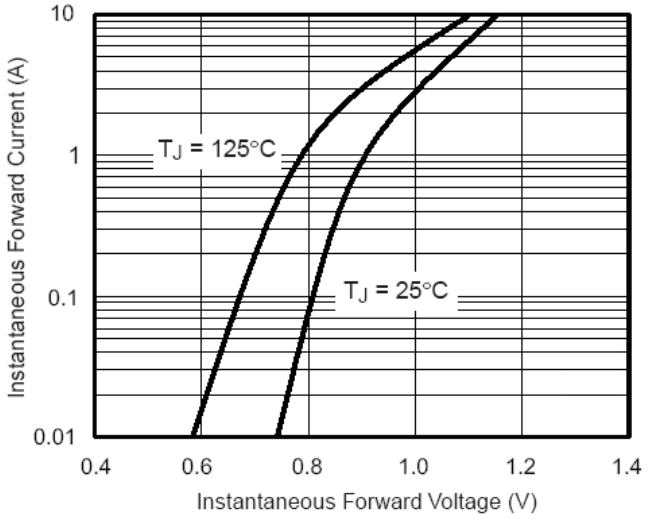
### Fig. 1 - Derating Curve Output Rectified Current



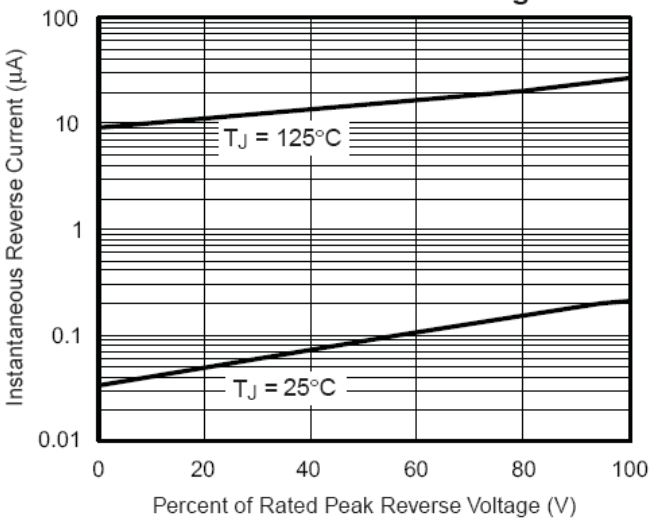

### Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg




### Fig. 3 - Typical Forward Characteristics Per Leg




### Fig. 4 - Typical Reverse Leakage Characteristics Per Leg




### Fig. 5 - Typical Junction Capacitance Per Leg