

GSIB2560-E THRU GSIB25100-E

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 600V to 1000V

Current: 25.0A

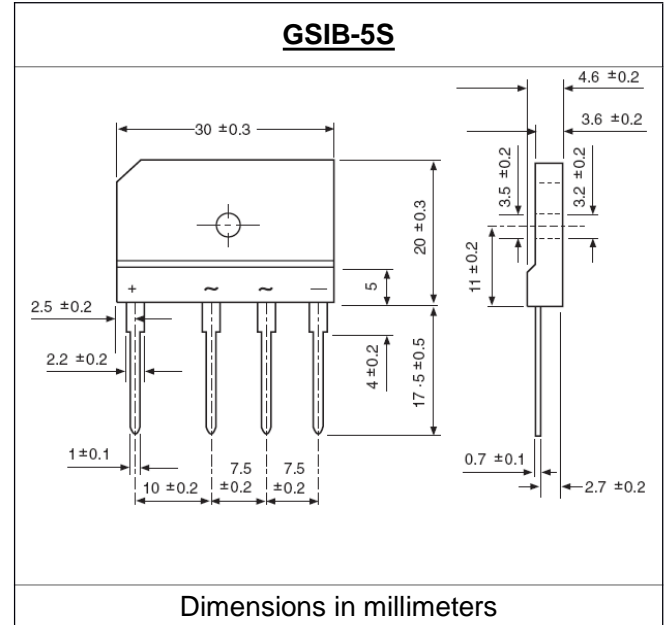


Features

Glass passivated chip junction
Ideal for printed circuit board
High surge current capability
High case dielectric strength
This series is UL listed under Recognized Component Index, file number E185029
Halogen Free

Mechanical Data

Terminal: Plated leads solderable per MIL-STD 202E, Method 208C
Case: UL-94 Class V-0 recognized Halogen Free Epoxy
Polarity: Polarity symbol marked on body
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

| | Symbol | GSIB2560-E | GSIB2580-E | GSIB25100-E | units |
|--|--|-------------|------------|-------------|--------------------|
| Maximum repetitive peak reverse voltage | V _{rrm} | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V _{rms} | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V _{dc} | 600 | 800 | 1000 | V |
| Maximum average forward Rectified output current at T _c = 98°C (Note 1) Ta = 25°C (Note 2) | I _{f(av)} | 25.0 | | | A |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) | I _{fsm} | 350 | | | A |
| Maximum instantaneous forward voltage drop per leg at 12.5A | V _f | 1.0 | | | V |
| Rating for fusing (t < 8.3ms) | I ² t | 500 | | | A ² Sec |
| Maximum DC reverse current at rated DC blocking voltage per leg Ta = 25°C Ta = 125°C | I _r | 10.0 350 | | | μA |
| Maximum thermal resistance per leg (Note2) (Note1) | R _{th(ja)} R _{th(jc)} | 22.0 1.0 | | | °C/W |
| Operating junction and storage temperature range | T _j , T _{stg} | -55 to +150 | | | °C |

Note:

1. Unit case mounted on Al plate heatsink
2. Unit case mounted on P.C.B. with heatsink
3. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

RATINGS AND CHARACTERISTIC CURVES GSIB2560-E THRU GSIB25100-E

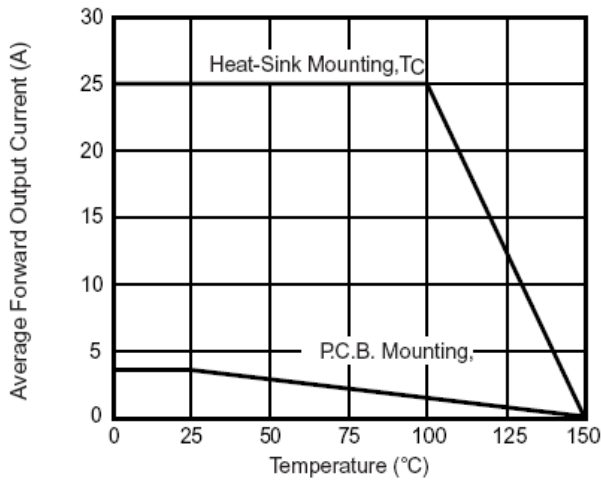


Figure 1. Derating Curve Output Rectified Current

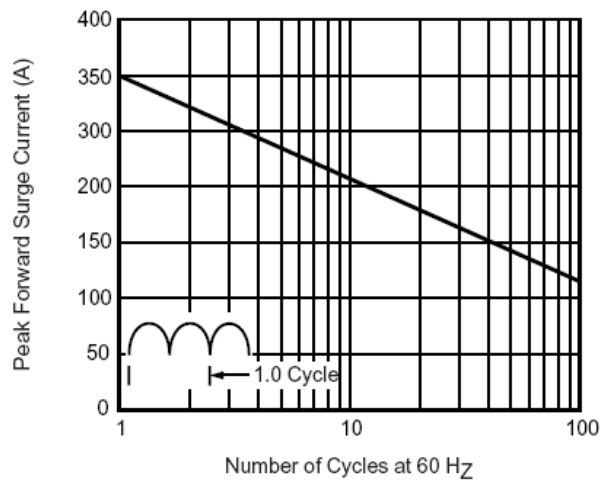


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

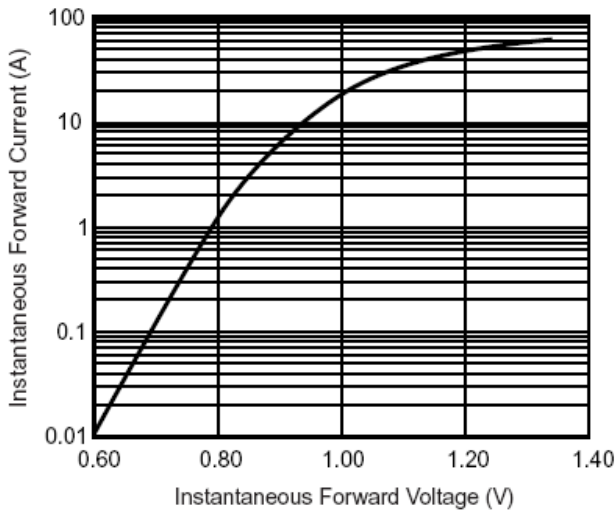


Figure 3. Typical Forward Characteristics Per Leg

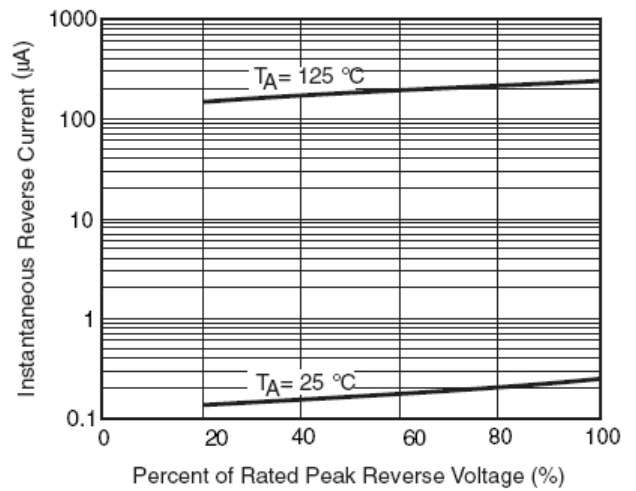


Figure 4. Typical Reverse Characteristics Per Leg

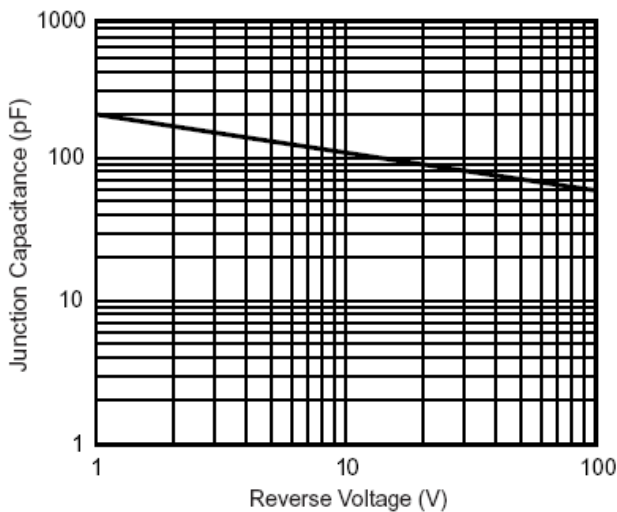


Figure 5. Typical Junction Capacitance Per Leg

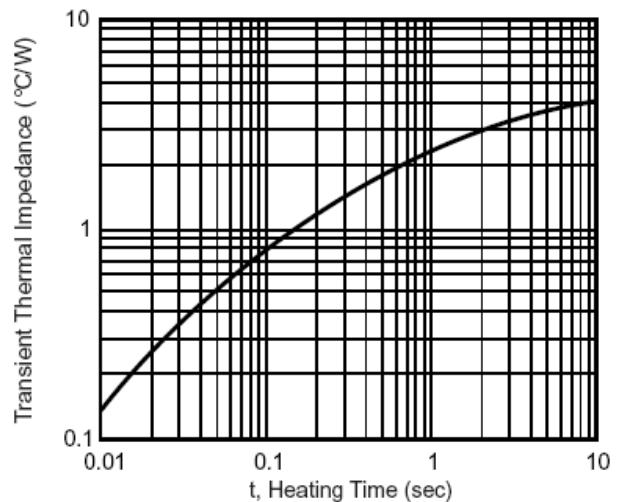


Figure 6. Typical Transient Thermal Impedance