# **GSIB1505 THRU GSIB15100**

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 to 1000V Current: 15.0A



# **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

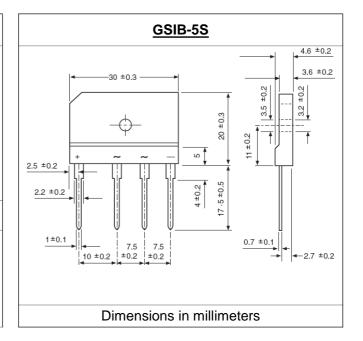
# **Mechanical Data**

Terminal: Plated leads solderable per MIL-STD 202E, Method 208C

Case: UL-94 Class V-0 recognized Flame Retardant 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	GSIB1 505	GSIB1 510	GSIB1 520	GSIB1 540	GSIB1 560	GSIB1 580	GSIB1 5100	units
Maximum repetitive peak reverse voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS voltage	Vrms	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	V
Maximum average forward $Tc = 107^{\circ}C$ (Note 1) Rectified output current at $Ta = 25^{\circ}C$ (Note 2)	If(av)	15.0 3.5							А
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	Ifsm	300							Α
Maximum instantaneous forward voltage drop per eg at 7.5A	Vf	0.95							V
Rating for fusing (t < 8.3ms)	l²t	240							A <sup>2</sup> Sec
Maximum DC reverse current at $Ta = 25$ °C ated DC blocking voltage per leg $Ta = 125$ °C	lr	10.0 250							μΑ
Maximum thermal resistance per leg (Note2) (Note1)	Rth(ja) Rth(jc)	22.0 1.5							°C/W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							$^{\circ}$ C

#### Note:

- 1. Unit case mounted onAl plate heatsink
- 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

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# **RATINGS AND CHARACTERISTIC CURVES GSIB1505 THRU GSIB15100**

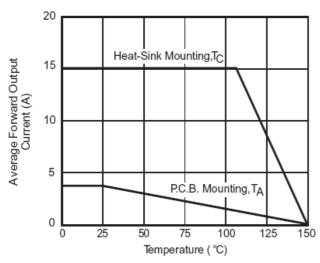


Figure 1. Derating Curve Output Rectified Current

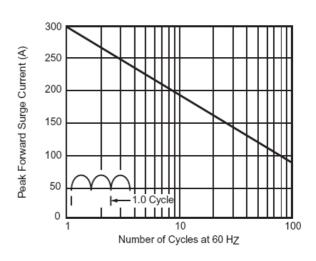


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current
Per Leg

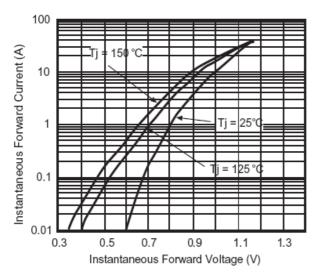


Figure 3. Typical Forward Characteristics Per Leg

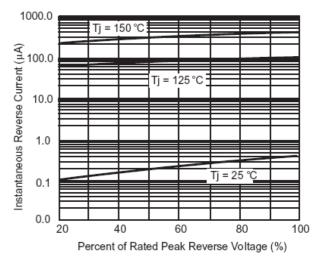


Figure 4. Typical Reverse Characteristics Per Leg

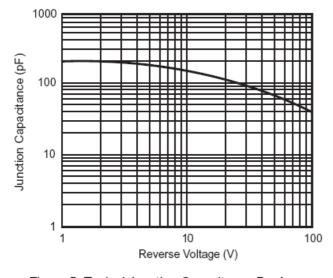


Figure 5. Typical Junction Capacitance Per Leg

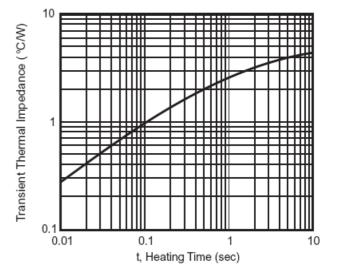


Figure 6. Typical Transient Thermal Impedance

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