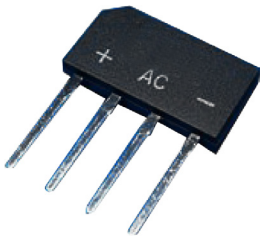
Glass Passivated Bridge Rectifiers

multicomp PRO

RoHS Compliant



Features

- Rating to 1,000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing moulded plastic technique results in inexpensive product

Specifications

Reverse Voltage : 50 to 1,000 Volts
Forward Current : 15 Amperes

Maximum Ratings and Electrical Characteristics

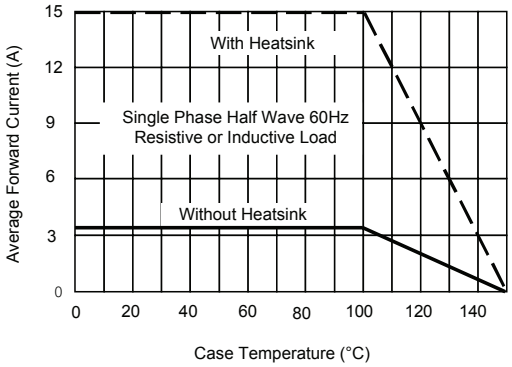
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	GSIB 15005	GSIB 1501	GSIB 1502	GSIB 1504	GSIB 1506	GSIB 1508	GSIB 1510	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1,000	V
Max. RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Max. DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1,000	
Max. Average Forward (with heatsink Note 2) Rectified Current at T_C = 100°C (without heatsink)	$I_{(AV)}$	15 3.2							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	240							
Max. Forward Voltage at 7.5 A DC	V_F	1.1							V
Max. DC Reverse Current at T_J = 25°C at Rated DC Blocking Voltage at T_J = 125°C	I_R	10 500							µA
I^2t Rating For Fusing (t < 8.3 ms)	I^2t	240							A^2s
Typical Junction Capacitance per Element (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							°C / W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}								

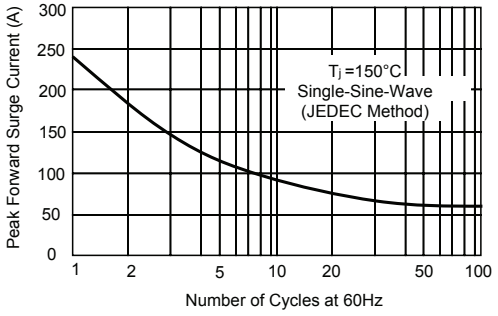
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V DC
2. Device mounted on 300 × 300 × 1.6mm cu plate heatsink

Rating and Characteristic Curves

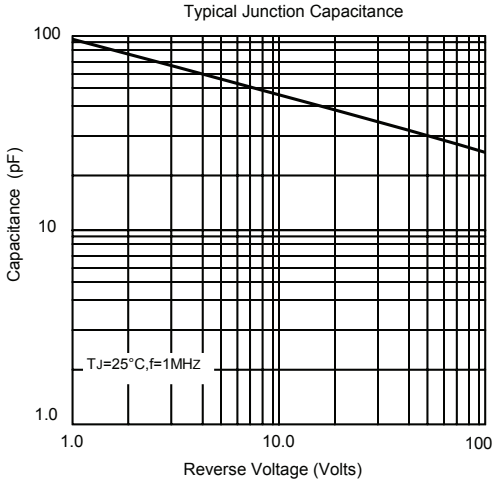
Forward Current Derating Curve



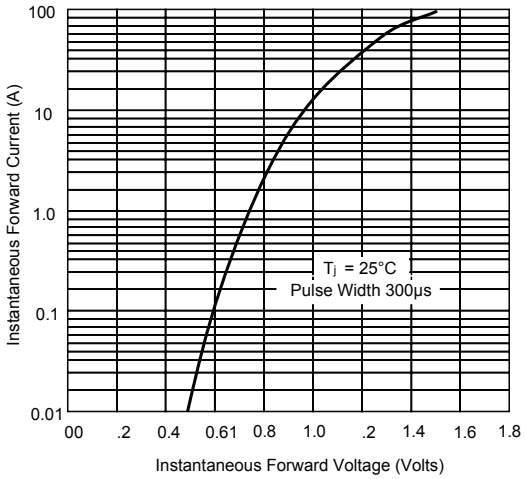
Maximum Non-Repetitive Surge Current



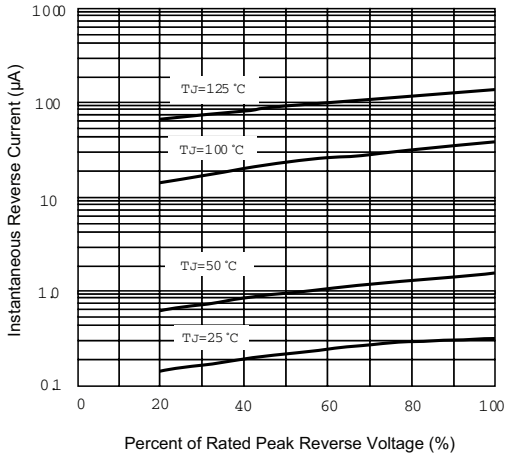
Typical Junction Capacitance



Typical Forward Characteristics

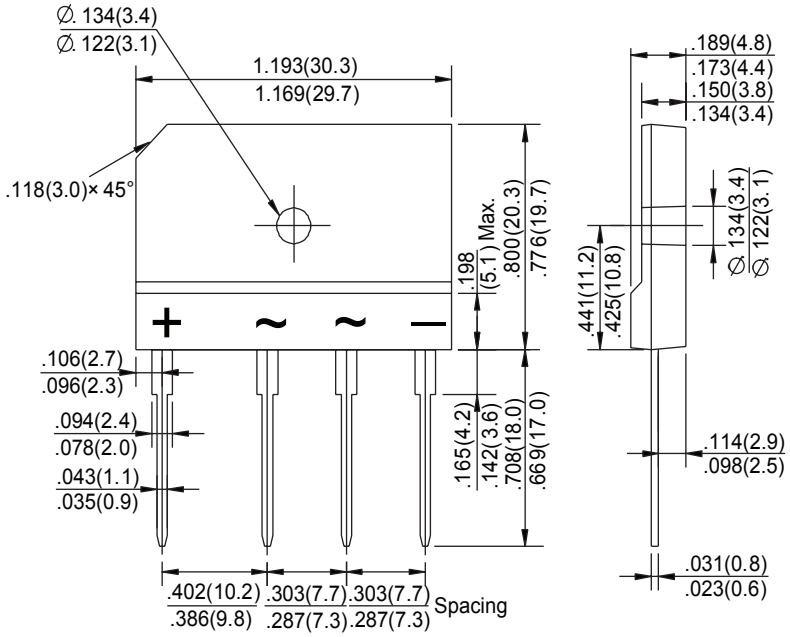


Typical Reverse Characteristics



Diagram

GSIB



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Bridge Rectifier, Single Phase	GSIB1501
	GSIB1502
	GSIB1504
	GSIB1506
	GSIB1508
	GSIB15005