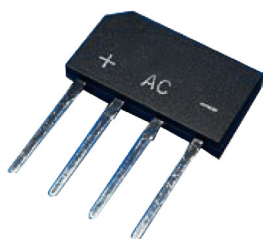


RoHS
Compliant**Features**

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- Meet UL flammability classification 94V-0

Applications

General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballast, adapter, etc.

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, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 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							
I ² t Rating For Fusing (t < 8.3 mS)	I ² t	240							
Peak Forward Voltage per Diode at 7.5A DC	V _F	1							V
Max. DC Reverse Current at Rated @T _J =25°C DC Blocking Voltage per Diode @T _J =125°C		5 500							µA
Typical Junction Capacitance per Diode (Note1)	C _J	60							pF
Typical Thermal Resistance to Ambient (Note 2)	R _{θJA}	4.5							°C / W
Typical Thermal Resistance to case (Note 2)	R _{θJC}	0.8							
Typical Thermal Resistance to lead (Note 2)	R _{θJL}	1.5							
Operating Junction Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}								

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

Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

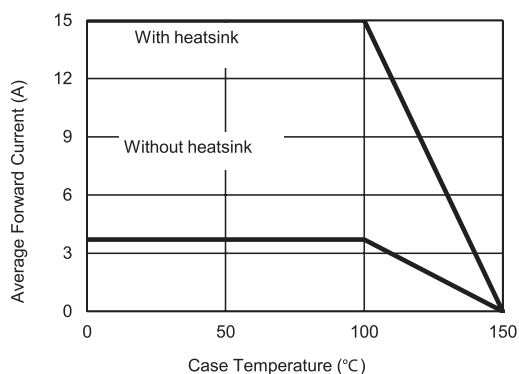


Fig. 2 - Maximum Non-Repetitive Surge Current

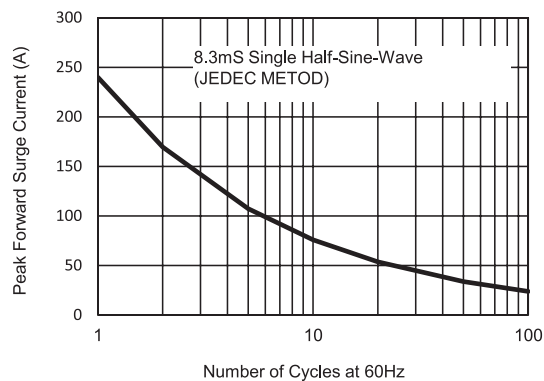


Fig. 3 - Typical Reverse Characteristics

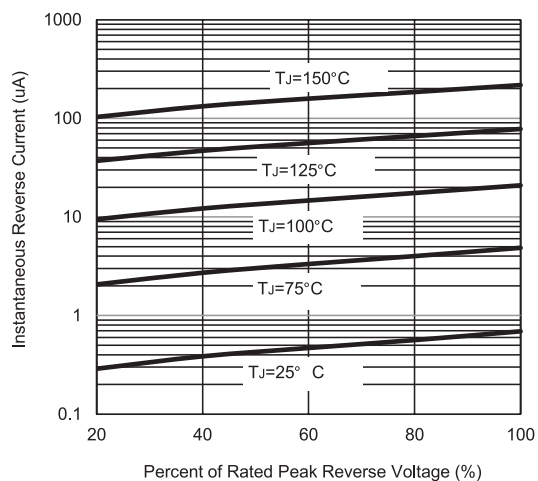


Fig. 4 - Typical Forward Characteristics

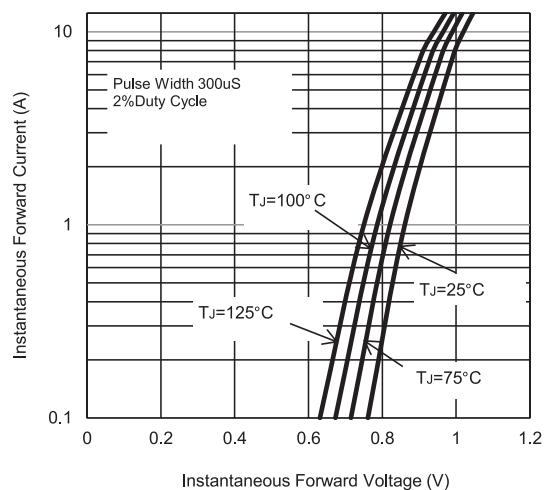
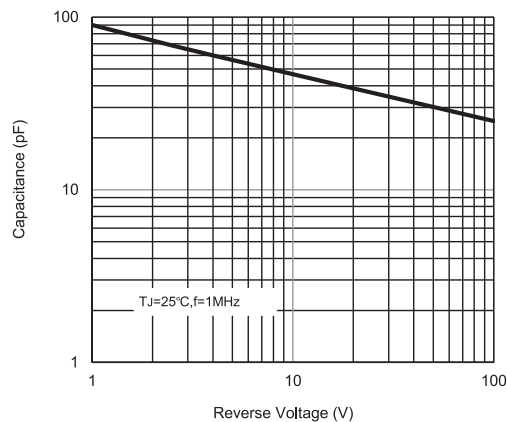
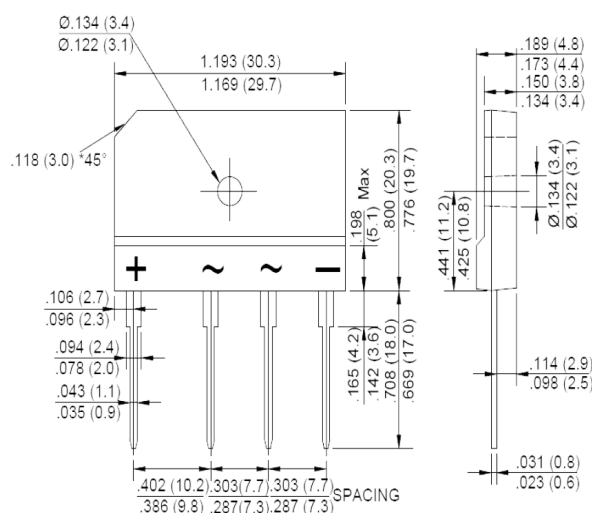


Fig. 5 - Typical Junction Capacitance



Diagram

GBJ



Part Number Table

Description	Part Number
Bridge Rectifier, Single Phase, 50V, 15A, SIP, 4 Pins, 1.1V	GBJ15005
Bridge Rectifier, Single Phase, 100V, 15A, SIP, 4 Pins, 1.1V	GBJ1501
Bridge Rectifier, Single Phase, 200V, 15A, SIP, 4 Pins, 1.1V	GBJ1502
Bridge Rectifier, Single Phase, 400V, 15A, SIP, 4 Pins, 1.1V	GBJ1504
Bridge Rectifier, Single Phase, 600V, 15A, SIP, 4 Pins, 1.1V	GBJ1506
Bridge Rectifier, Single Phase, 800V, 15A, SIP, 4 Pins, 1.1V	GBJ1508
Bridge Rectifier, Single Phase, 1kV, 15A, SIP, 4 Pins, 1.1V	GBJ1510

Dimensions : Inches (Millimetres)

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