



SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

GBJ15005 THRU GBJ1510

VOLTAGE RANGE
CURRENT

50 to 1000 Volts
15.0 Ampere

FEATURES

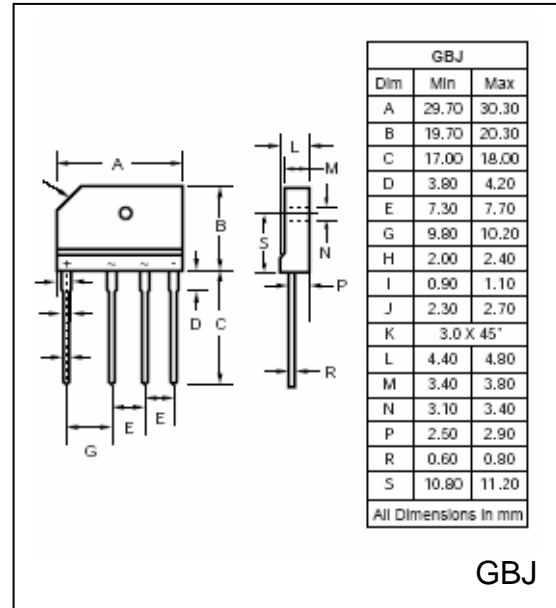
- Plastic package has UL flammability Classification 94V – 0
- Glass passivated chip junction
- High case dielectric strength of 1500 V_{RMS}
- High surge current capability
- High temperature soldering guaranteed: 260 °C /10 seconds, 0.375” (9.5mm) lead length

MECHANICAL DATA

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750 method 2026
- Mounting position: any (Note 2)
- Mounting Torque: 6 in-lbs max.
- Weight: 0.26 ounce, 7.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



	SYMBOLS	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current, At T _C = 100°C	I _(AV)	15							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I _{FSM}	240							Amps
Rating for Fusing (t<8.3mS)	I ² t	240							A ² s
Maximum Instantaneous Forward Voltage drop per Bridge element 7.5A	V _F	1.05							Volts
Maximum DC Reverse Current at Rated T _A = 25 °C	I _R	10							μA
DC Blocking Voltage per element T _A = 125 °C		500							
Typical Junction Capacitance, per leg (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C _J	60							pF
Typical Thermal Resistance (Note 1 and 2)	R _{0JA}	2.7							°C/W
Operating Junction Temperature Range	T _J	(-65 to +150)							°C
Storage Temperature Range	T _{STG}	(-65 to +150)							°C

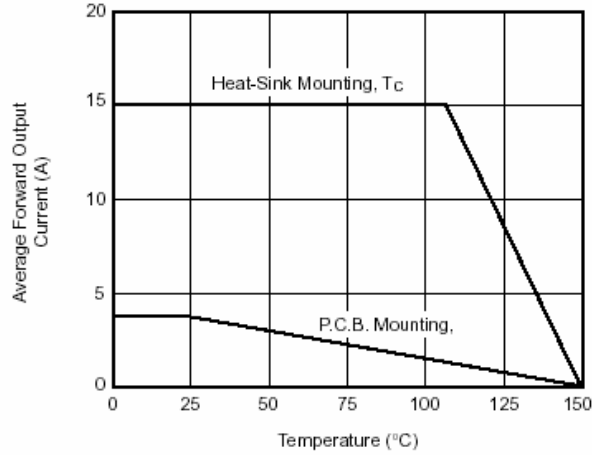
Notes:

1. Thermal resistance from junction to case per element. Unit mounted on 300mm x 300mm x 1mm) aluminum plate heat sink.
2. Recommended mounting position is to bolt down on heatsink with silicon thermal compound for maximum heat transfer with #6 screw

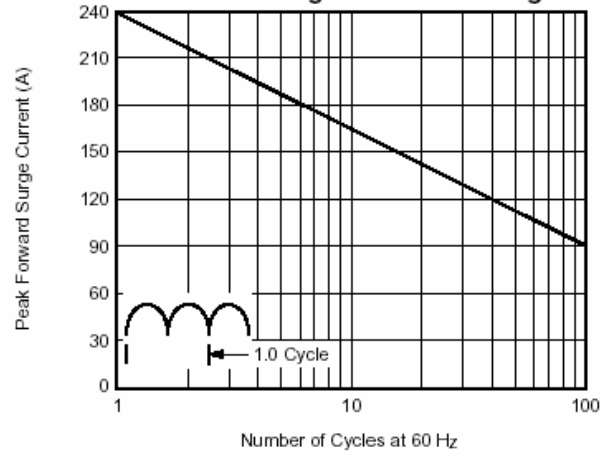


RATINGS AND CHARACTERISTIC CURVES GBJ15005 THRU GBJ1510

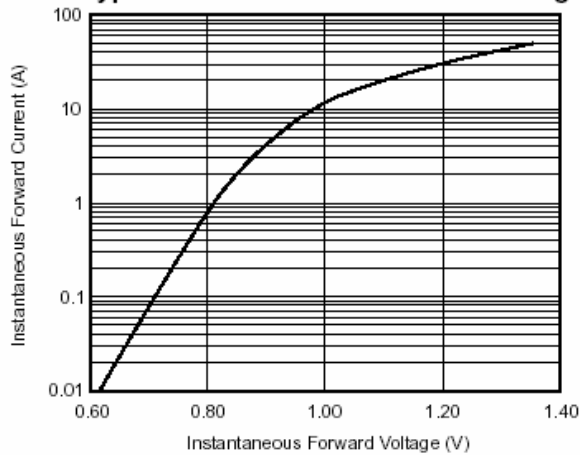
Derating Curve Output Rectified Current



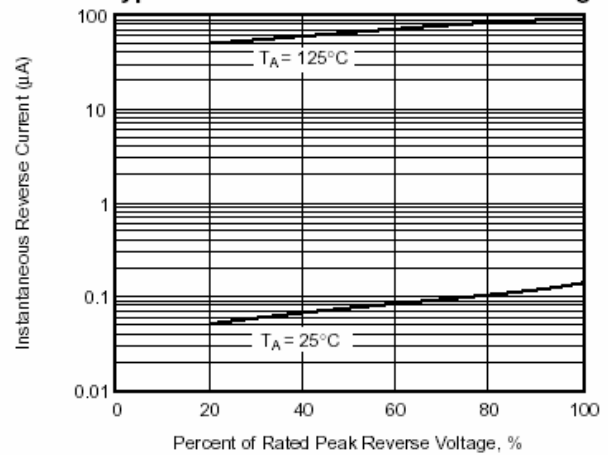
Maximum Non-Repetitive Peak Forward Surge Current Per Leg



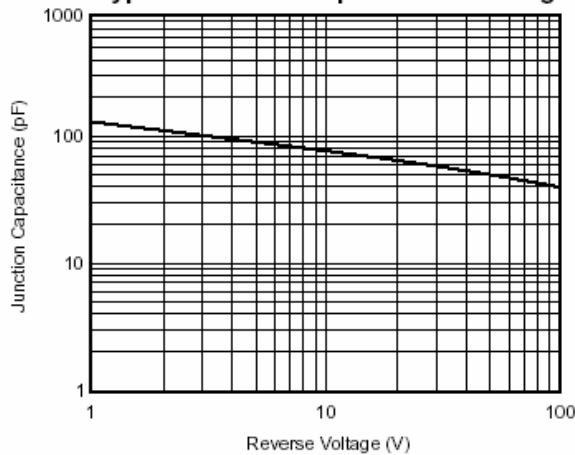
Typical Forward Characteristics Per Leg



Typical Reverse Characteristics Per Leg



Typical Junction Capacitance Per Leg



Typical Transient Thermal Impedance

