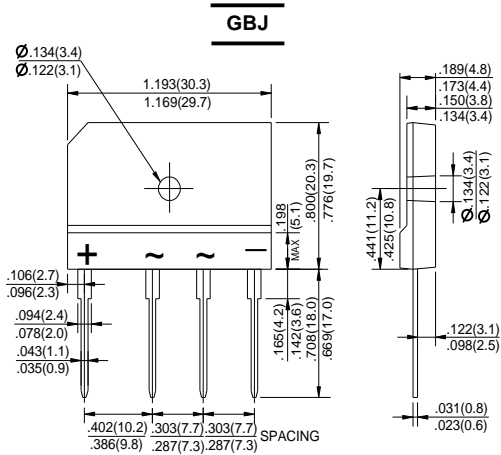


GBJ15005 thru GBJ1510

Bridge Rectifier

Reverse Voltage - 50 to 1000 Volts Forward Current - 15 Amperes



Dimensions in inches and (millimeters)

FEATURES

- ◆ Glass passivated chip
- ◆ High surge forward current capability

MECHANICAL DATA

Case: Molded plastic body
Lead: Solder plated
Polarity: As marked

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	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T _c =100°C (without heatsink)	I _(AV)	15.0							3.2	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	240								A
Maximum Forward Voltage at 7.5A DC	V _F	1.1								V
Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C	I _R	10.0							500	uA
I ² t Rating for Fusing (t<8.3ms)	I ² t	240								A ² s
Typical Junction Capacitance Per Element (Note1)	C _J	60								pF
Typical Thermal Resistance (Note2)	R _{JC}	0.8								°C/W
Operating Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Device mounted on 300mm*300mm*1.6mm cu plate heatsink.

RATINGS AND CHARACTERISTIC CURVES GBJ15005 THRU GBJ1510

FIG.1-FORWARD CURRENT DERATING CURVE

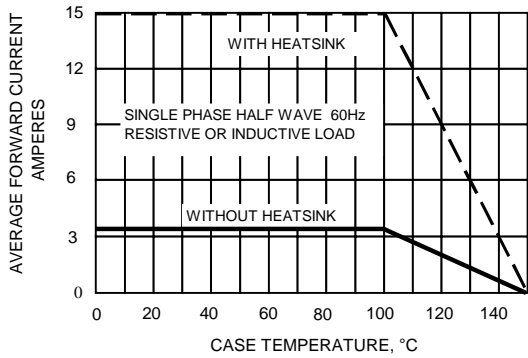


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

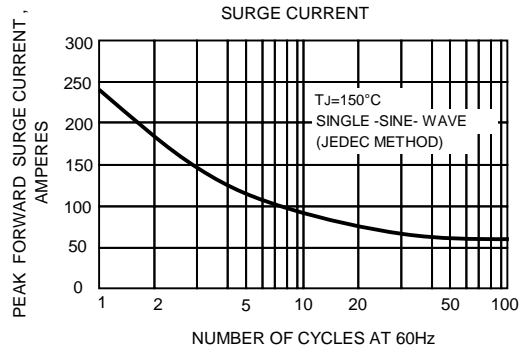


FIG.3-TYPICAL JUNCTION CAPACITANCE

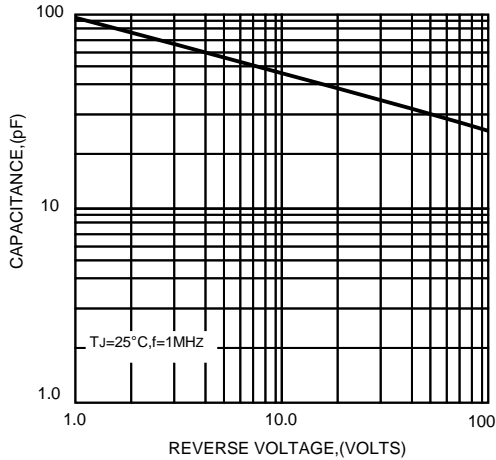


FIG.4-TYPICAL FORWARD CHARACTERISTICS

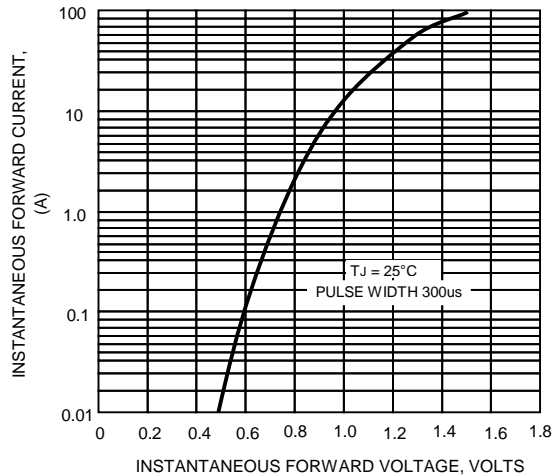


FIG.5-TYPICAL REVERSE CHARACTERISTICS

