

## **GBJ15005A THRU GBJ1510A**

Single Phase 15.0AMP Glass Passivated Bridge Rectifier

#### **Features**

Glass passivated die construction

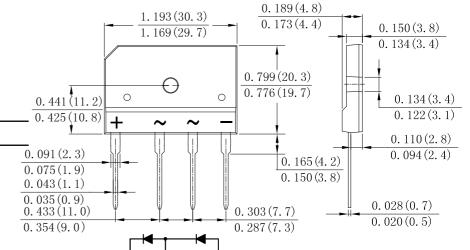
· Low forward voltage drop

· High current capability

High surge current capability

Plastic material-UL flammability 94V-0

## Case: GBJ



dimensions in inches and (millimeters)

#### **Mechanical Data**

· Case: Molded plastic, GBJ

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

· Polarity: As Marked on Case

Mounting Position: Any

· Marking: Type Number

· Lead Free: For RoHS / Lead Free Version

### **Maximum Ratings and Electrical Characteristics**

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

TYPE NUMBER	SYMBOL	GBJ 15005A	GBJ 1501A	GBJ 1502A	GBJ 1504A	GBJ 1506A	GBJ 1508A	GBJ 1510A	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>DC</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@Tc=90°C	IF(AV)	15.0						A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	240							А
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	239.04						A <sup>2</sup> s	
Forward Voltage per element @IF=7.5A @IF=15A	VFM	1.0 1.1						٧	
Peak Reverse Current @T」=25 ℃ At Rated DC Blocking Voltage @T」=125 ℃	lR	5.0 200							uA
Dielectric Strength	Vids	2500						V	
The proposed installation torque Max torque	Tor	Typ. 5.0 Max 8.0						Kgf.cm	
Typical Junction Capacitance (Note 2)	Cı	65							pF
Between junction and ambient, Without heatsink	RөJA	12							°C/W
Between junction and case, With heatsink	Rелс	1.5							
Operating and Storage Temperature Range	Т <sub>J</sub> ,Тsтg	-55to+150						$^{\circ}\mathbb{C}$	

Note: 1. Unit case mounted on aluminum piate heatsink

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C..

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Average Forward Current (A)

IFSM, Peak Forward Surge Current (A)

Instantaneous Reverse Current(uA)

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Instantaneous Forward Current (A)

C<sub>i</sub>, Junction Capacitance (pF)

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Fig. 1 Forward Current Derating Curve

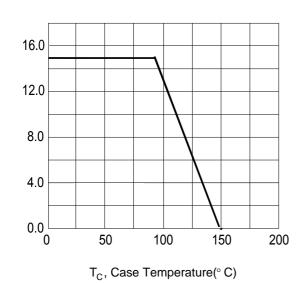


Fig.3 Maximum Peak Forward Surge Current

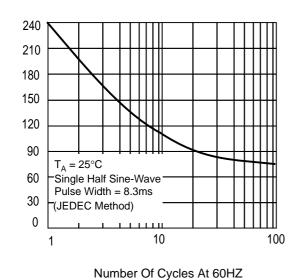


Fig.5 Typical Reverse Characteristics

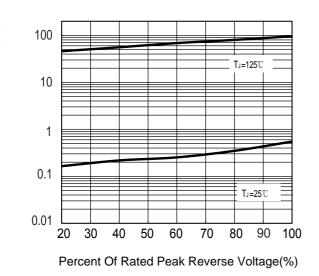
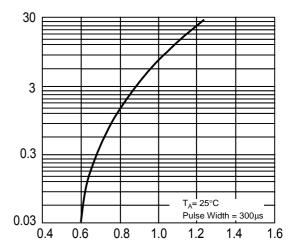
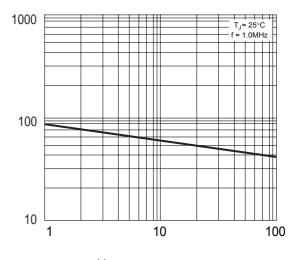


Fig. 2 Typ. Forward Characteristics



V<sub>F</sub>, Instantaneous Forward Voltage (V)

Fig . 4 Typical Junction Capacitance



V<sub>R</sub>, Reverse Voltage (V)



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