

# **Glass Passivated Low Profile Bridge Rectifier**

Current

15A

HF

Voltage

#### **Features**

• Glass passivated chip junction

600 V

- Thin single in-line package
- High surge current capability

#### **Mechanical Data**

- Case : GBJA Package
- Molding compound meets UL 94 V-0 flammability Rating, RoHS-compliant, Halogen free
- Terminals : Tin plated leads , Solderable per J-STD-002 and JESD22-B102
- Approx. Weight : 4.422 grams

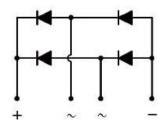
### Application

- Slim Adapter Power
- Game Console Power
- TV Power

Key Parameters			
Parameter	Value		
V <sub>RRM</sub>	600V		
I <sub>F</sub> (AV)	15A		
I <sub>FSM</sub>	240A		
I <sub>R</sub>	5uA		
TJ max.	150°C		
Package	GBJA		

<u>GBJA</u>







# **Maximum Ratings and Thermal Characteristics** (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS		
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	600	V	
Maximum RMS Voltage		Vrms	420	V	
Maximum DC Blocking Voltage		VDC	600	V	
Maximum Average Forward Current	With heatsink		15		
	Without heatsink	IF(AV)	3.2	A	
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	@ T <sub>A</sub> = 25 °C		240		
	@ T <sub>A</sub> = 125 °C	IFSM	192	A	
Peak Forward Surge Current : 1.0 ms Single Half Sine-Wave Superimposed On Rated Load	@ T <sub>A</sub> = 25 °C		480	A	
	@ T <sub>A</sub> = 125 °C	IFSM	384		
$I^2$ t rating for fusing (t = 8.3ms)		I <sup>2</sup> t	240	A <sup>2</sup> S	
Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4$	V	CJ	83	pF	
		RθJA	10		
Typical Thermal Resistance (Note1)	Rejl	3	°C/W		
		R <sub>θJC</sub>	1.5		
Operating junction and storage temperature range		TJ, TSTG	-55~150	°C	
Mounting torque @ Recommend torque:5Kg.cm		Tor	8	Kg.cm	

## Electrical Characteristics (T<sub>A</sub> = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	VF	I⊧ = 7.5 A, TJ = 25 °C	-	-	1.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 600 V, T <sub>J</sub> = 25 °C	-	-	5	•
		V <sub>R</sub> = 600 V,T <sub>J</sub> = 125 °C	-	-	100	uA

NOTES :

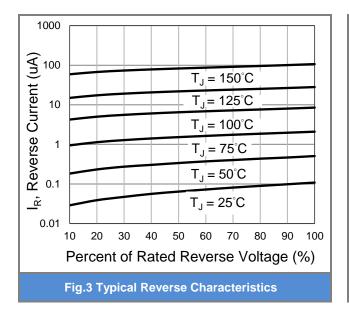
1. Device mounted on 75mm \* 45mm \* 5.5mm Aluminum Plate Heatsink.

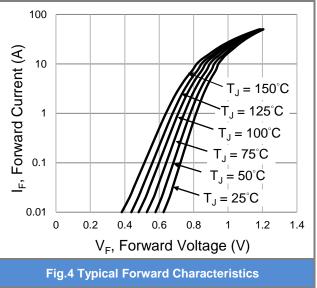




#### 200 C<sub>J</sub>, Junction Capacitance (pF) 20 160 I<sub>F</sub>, Forward Current (A) 15 120 10 80 5 40 0 0 0 15 30 45 60 75 90 105 120 135 150 0 40 60 80 100 120 140 160 180 200 20 $T_{C}$ , Case Temperature (°C) V<sub>R</sub>, Reverse Bias Voltage (V) Fig.1 Forward Current Derating Curve Fig.2 Typical Junction Capacitance





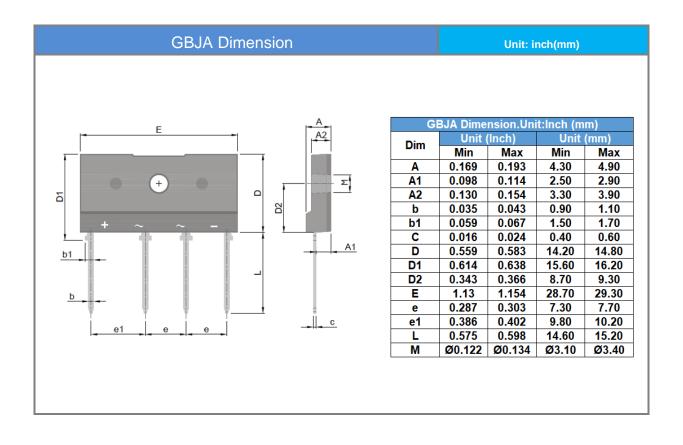




## **Product and Packing Information**

Part No.	Package Type	Packing Type	Marking
GBJA1506	GBJA	15 pcs / tube	GBJA1506

### Packaging Information





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