# Low VF Bridge Rectifiers

#### Features

- UL recognition, file #E230084
- based on silicon planar process
- Low VF
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## **Typical Applications**

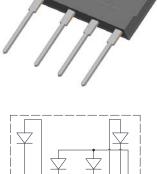
General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### **Mechanical Data**

- Package: 6KBJ Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body

### ■Maximum Ratings (T<sub>a</sub>=25 $^{\circ}$ C Unless otherwise specified )

PARAMETER		SYMBOL	UNIT	GBJU1508
Device marking code				GBJU1508
Maximum Repetitive Peak Reverse Voltage		VRRM	V	800
Maximum RMS Voltage		VRMS	V	560
Maximum DC blocking Voltage		VDC	V	800
Average rectified output current @60Hz sine wave, R-load	With heatsink Tc =128℃	- 10	A	15.0
	Without heatsink Ta =25℃			3.2
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C		IFSM	A	250
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				500
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		l²t	A <sup>2</sup> S	259.4
Storage temperature		T <sub>stg</sub>	°C	-55 ~ +150
Junction temperature		Тј	°C	-55 ~ +150
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	κv	2.5
Mounting torque @Recommend torque: 5kg·cm		Tor	kg∙cm	8



#### **Electrical Characteristics** ( $T_a=25^{\circ}C$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Тур	Мах
Instantaneous forward voltage drop per diode	VF	V	IFM=12.5A	0.80	0.867	0.92
DC reverse current at rated DC blocking voltage per diode	2	μΑ	Tj =25℃	-	0.008	5
	чĸ		Tj =125℃	-	-	50
Junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	60	114	200

# **Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

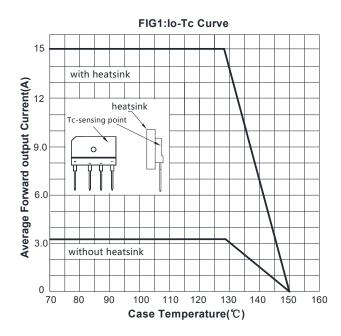
PARAMETER		SYMBOL	UNIT	GBJU1508
	Between junction and ambient, Without heatsink	RθJ-A		18.0
Typical Thermal Resistance	Between junction and lead, With heatsink	RθJ-L	°C/W	5.0
	Between junction and case, With heatsink	RθJ-C		0.8

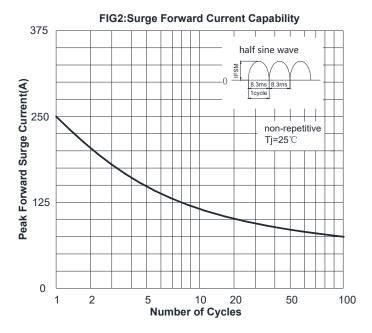
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

#### ■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJU1508	B1	Approximate 6.5	15	750	1500	TUBE

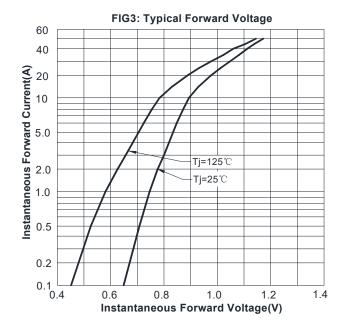
# Characteristics(Typical)

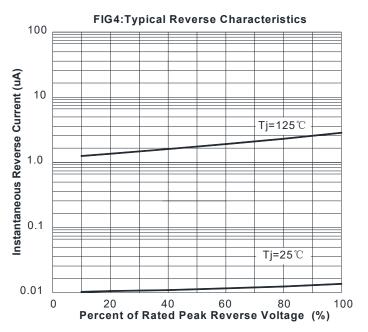




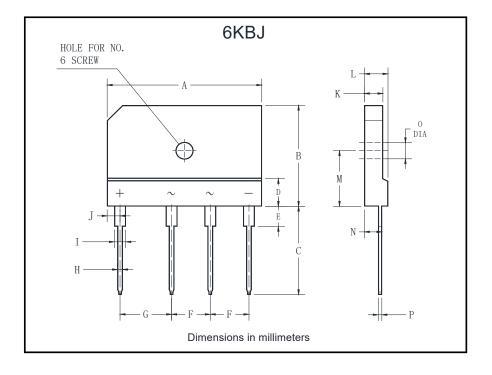
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# Outline Dimensions



6KBJ					
Dim	Min	Max			
А	29.7	30.3			
В	19.7	20.3			
С	17.0	18.0			
D	4.8	5.8			
Е	3.8	4.2			
F	7.3	7.7			
G	9.8	10.2			
Н	0.9	1.1			
I	2.0	2.4			
J	2.3	2.7			
К	3.4	3.8			
L	4.4	4.8			
М	10.8	11.2			
Ν	3.1	3.7			
0	3.1	3.4			
Р	0.6	0.8			



# **GBJU1508**

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