# Low VF Bridge Rectifiers

#### Features

- UL recognition, file #E230084
- Glass passivated chip junction
- 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 (Ta=25 $^{\circ}$ C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	GBJL5008
Device marking code				GBJL5008
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 =55°C		A	50.0
	Without heatsink Ta =25℃	- Io		3.5
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C		15014	A	500
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		IFSM		1000
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		l <sup>2</sup> t	A <sup>2</sup> S	1037.5
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	GBJL5008
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=25A	0.97
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	Tj =25℃	5
			Tj =125℃	200
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	275

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

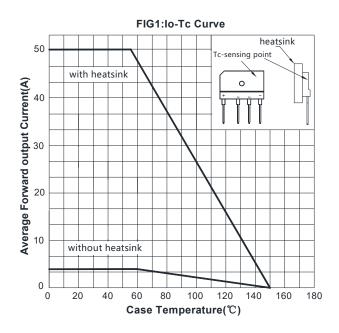
PARAMETER		SYMBOL	UNIT	GBJL5008
Between junction and ambient, Typical Without heatsink		RθJ-A	°C 0.01	18.0
	Between junction and case, With heatsink	RθJ-C	°C/W	1.0

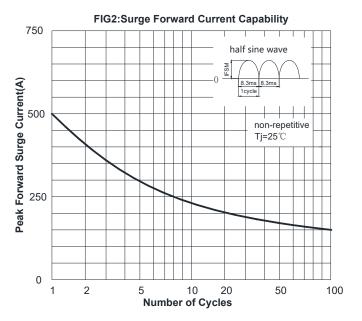
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

#### ■Ordering Information (Example)

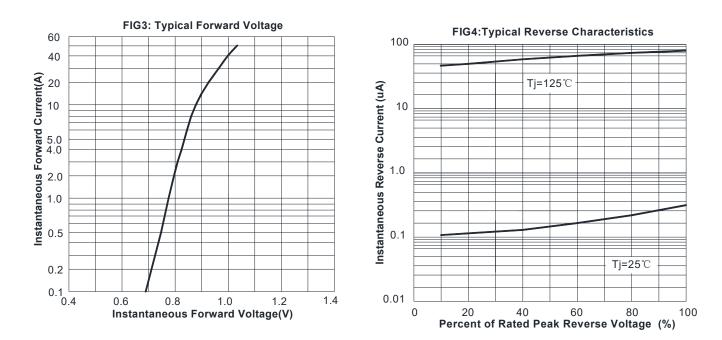
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJL5008	B1	Approximate 6.5	15	750	1500	TUBE

## Characteristics(Typical)

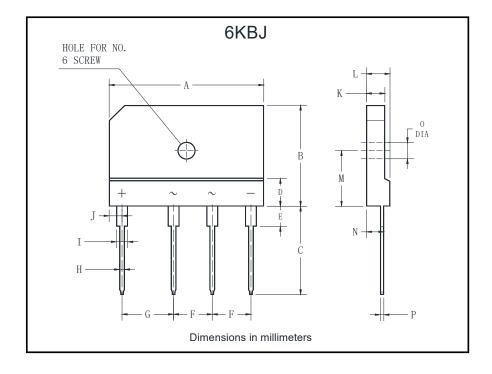




2/4



## 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
N	3.1	3.7
0	3.1	3.4
Р	0.6	0.8

3/4



# **GBJL5008**

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4/4