

# **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°C Unless otherwise specified)

PARAMET	ER	SYMBOL	UNIT	GBJ15A	GBJ15B	GBJ15D	GBJ15G	GBJ15J	GBJ15K	GBJ15M	
Device marking code				GBJ15A	GBJ15B	GBJ15D	GBJ15G	GBJ15J	GBJ15K	GBJ15M	
Maximum Repetitive Peak Reverse Voltage		VRRM	V	50	100	200	400	600	800	1000	
Maximum RMS Voltage		VRMS	V	35	70	140	280	420	560	700	
Maximum DC blocking Volta	Maximum DC blocking Voltage		V	50	100	200	400	600	800	1000	
Average rectified output				15.0							
current @60Hz sine wave, R-load	Without heatsink T <sub>a</sub> =25°C	- IO	A	3.5							
Forward Surge Current (Non-repetitive) @8.3ms,Half-sine wave,1 cycle, Tj=25°C		Isou		250							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		IFSM	A	500							
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode		l²t	A <sup>2</sup> S	259							
Storage temperature		T <sub>stg</sub>	°C	-55 ~ <b>+</b> 150							
Junction temperature		Tj	°C	-55 ~ <b>+</b> 150							
Dielectric strength @ Terminals to case, AC 1 minute		Vdis	KV	2.5							
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8							

# **GBJ15A THRU GBJ15M**

**■Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	GBJ15A	GBJ15B	GBJ15D	GBJ15G	GBJ15J	GBJ15K	GBJ15M
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=7.5A	1.0						
Maximum DC reverse current at rated DC blocking voltage	IR	μA	T <sub>j</sub> =25℃	5						
per diode	ıĸ .	μΑ	T <sub>j</sub> =125°C	100						
Typical junction capacitance	Cj	ηF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	64						

### **■Thermal Characteristics** $(T_a=25^{\circ}\mathbb{C} \text{ Unless otherwise specified})$

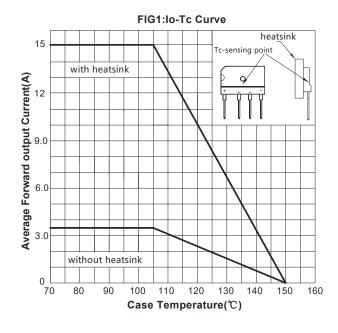
	PARAMETER	SYMBOL	UNIT	GBJ15A	GBJ15B	GBJ15D	GBJ15G	GBJ15J	GBJ15K	GBJ15M
Thermal	Between junction and ambient, Without heatsink	RθJ-A °C/W		18.0						
Resistance	Between junction and case, With heatsink	R <sub>0</sub> J-C	C/VV	1.5						

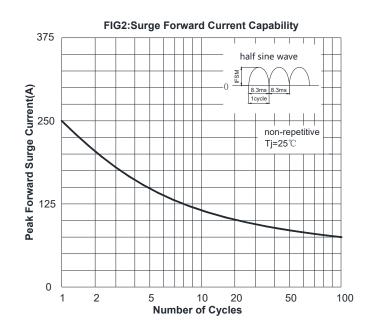
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

**■Ordering Information** (Example)

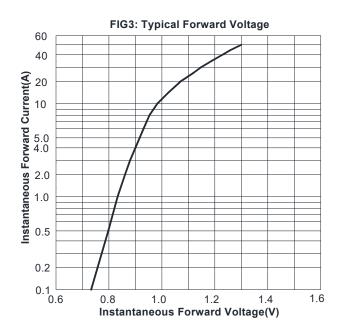
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
GBJ15A THRU GBJ15M	B1	Approximate 5.67	15	750	1500	TUBE

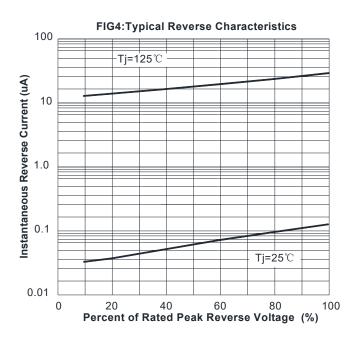
## ■ Characteristics(Typical)



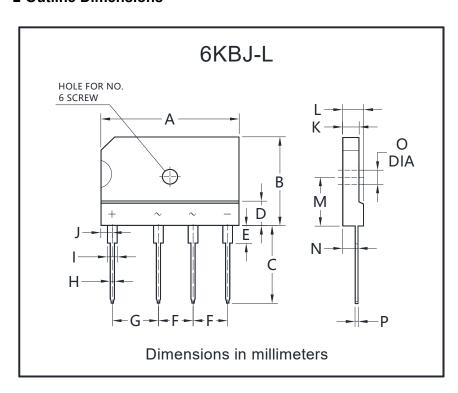


# **GBJ15A THRU GBJ15M**





### **■ Outline Dimensions**



6KBJ-L							
Dim	Min	Max					
Α	29.7	30.3					
В	19.7	20.3					
С	17.0	18.0					
D	5.3	6.3					
Е	3.8	4.2					
F	7.3	7.7					
G	9.8	10.2					
Н	0.9	1.1					
1	2.0	2.4					
J	2.3	2.7					
K	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	0.35	0.65					



## **GBJ15A THRU GBJ15M**

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