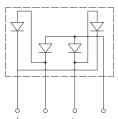


# **Bridge Rectifiers**





#### **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: 4KBJ

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)

PARAM	ETER	SYMBOL	UNIT	KBJ4AA	KBJ4BA	KBJ4DA	KBJ4GA	KBJ4JA	KBJ4KA	KBJ4MA
Device marking code				KBJ4AA	KBJ4BA	KBJ4DA	KBJ4GA	KBJ4JA	KBJ4KA	KBJ4MA
Maximum Repetitive Peak Reverse Voltage		VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	Maximum RMS Voltage		V	35	70	140	280	420	560	700
Maximum DC blocking V	Maximum DC blocking Voltage		V	50	100	200	400	600	800	1000
Average Rectified Output Current@60Hz sine wave, R-load	With heatsink Tc =125°C Without heatsink Ta =25°C	- 10	А				4.0			
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25°C		IFSM	Α	150						
Current squared time @1ms≤t≤8.3ms, Tj=25°C, rating of per diode		l <sup>2</sup> t	A <sup>2</sup> S	93.4						
Storage temperature		T <sub>stg</sub>	°C	-55 ~ <b>+</b> 150						
Junction temperature		Tj	°C	-55 ~ +150						
Dielectric strength  @ Terminals to case, AC 1 minute		Vdis	KV	2						
Mounting torque @Recommend torque: 5kg cm		Tor	kg∙cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBJ4AA	KBJ4BA	KBJ4DA	KBJ4GA	KBJ4JA	KBJ4KA	KBJ4MA		
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=2.0A	1.0								
Maximum DC reverse current at rated DC blocking voltage per	IR	μA	T <sub>j</sub> =25°C	T <sub>j</sub> =25℃					5			
diode	ır.	μΛ	T <sub>j</sub> =125°C	100								
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C				40					

### ■Thermal Characteristics (Ta=25°C Unless otherwise specified)

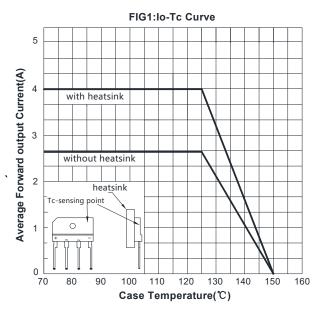
PARAMETER		SYMBOL	UNIT	KBJ4AA	KBJ4BA	KBJ4DA	KBJ4GA	KBJ4JA	KBJ4KA	KBJ4MA
	Between junction and ambient, Without heatsink		°C/W	20						
Resistance Between junction and case, With heatsink		R <sub>0</sub> J-C	C/VV	3						

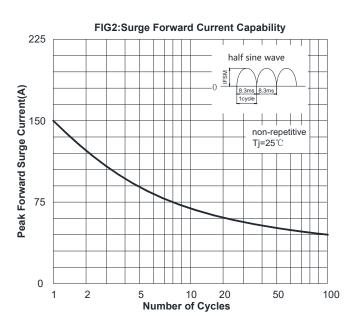
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

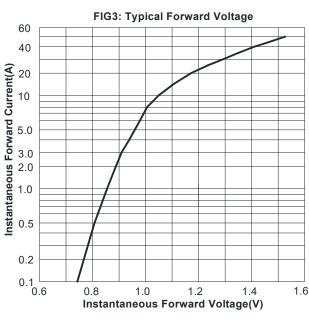
**■Ordering Information** (Example)

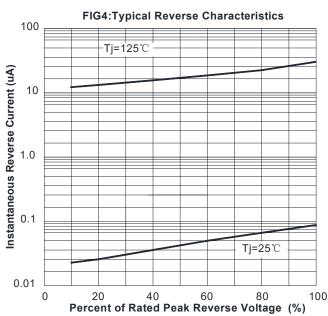
PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBJ4AA ~ KBJ4MA	B1	Approximate 3.93	20	1000	2000	Tube

### **■ Characteristics** (Typical)



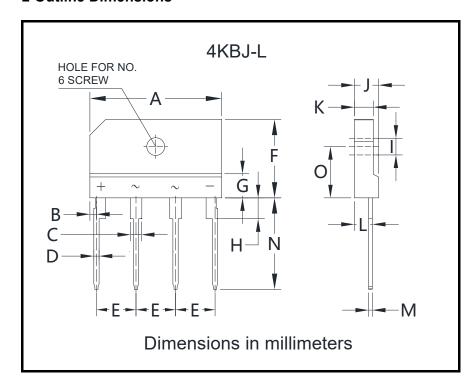








### **■ Outline Dimensions**



4KBJ-L						
Dim	Min	Max				
Α	24.7	25.3				
В	1.05	1.45				
С	1.7	2.1				
D	0.9	1.1				
E	7.3	7.7				
F	14.7	15.3				
G	3.8	4.2				
Н	3.3	3.7				
I	3.1	3.4				
J	4.4	4.8				
K	3.4	3.8				
L	2.95	3.25				
М	0.35	0.65				
N	17.0	18.0				
0	9.5	10.1				



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