

#### **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)

PARAMETER		SYMBOL	UNIT	KBJ15005	KBJ1501	KBJ1502	KBJ1504	KBJ1506	KBJ1508	KBJ1510	
Device marking code				KBJ15005	KBJ1501	KBJ1502	KBJ1504	KBJ1506	KBJ1508	KBJ1510	
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 Volt	age	VDC	V	50	100	200	400	600	800	1000	
Average Rectified Output	With heatsink T <sub>C</sub> =105°C	- Io	А	15.0							
@60Hz sine wave, R-load	Without heatsink Ta =25℃	10		3.6							
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave 1 cycle, Tj=25°C			А	220							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		IFSM		440							
Current squared time @1ms≤t≤8.3ms Tj=25°C,rating of per diode		l²t	A <sup>2</sup> S	201							
Storage temperature		T <sub>stg</sub>	°C	-55 ~ +150							
Junction temperature		Tj	$^{\circ}$	-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	KBJ15005	KBJ1501	KBJ1502	KBJ1504	KBJ1506	KBJ1508	KBJ1510	
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=7.5A	IFM=7.5A		1.0	1.0				
Maximum DC reverse current		۸	T <sub>j</sub> =25℃	T <sub>j</sub> =25°C 5							
at rated DC blocking voltage per diode	IR	μA	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	70							

# **KBJ15005 THRU KBJ1510**

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

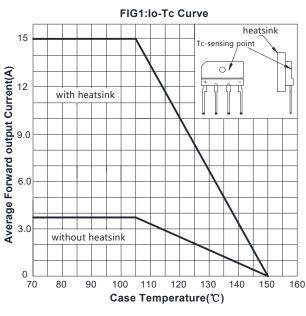
PARAMETER		SYMBOL	UNIT	KBJ15005	KBJ1501	KBJ1502	KBJ1504	KBJ1506	KBJ1508	KBJ1510
Thermal	Between junction and ambient, Without heatsink	RθJ-A °C/W		20						
Resistance	Resistance Between junction and case, With heatsink		C/VV	1.5						

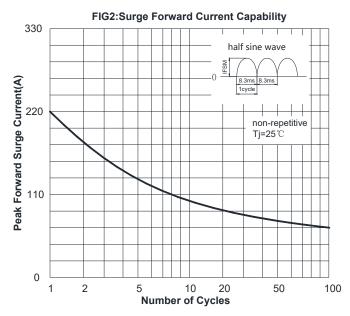
Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

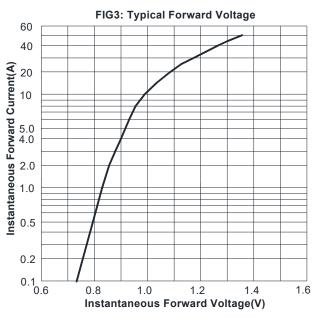
### **■Ordering Information** (Example)

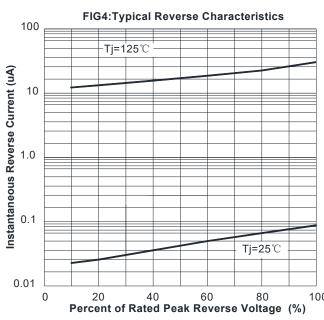
PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBJ15005 ~ KBJ1510	B1	Approximate 4.27	20	1000	2000	Tube

### **■ Characteristics**(Typical)





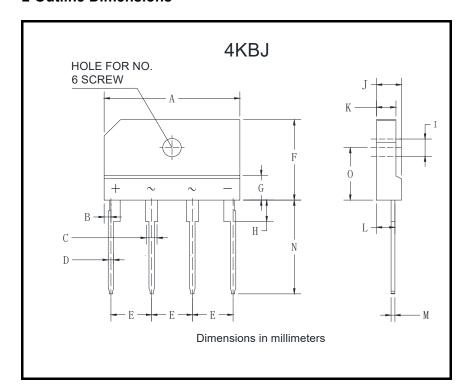






# **KBJ15005 THRU KBJ1510**

### **■ Outline Dimensions**



4KBJ					
Dim	Min	Max			
Α	24.7	25.3			
В	1.05	1.45			
С	1.7	2.1			
D	0.9	1.1			
Е	7.3	7.7			
F	14.7	15.3			
G	3.8	4.2			
Н	3.3	3.7			
1	3.1	3.4			
J	4.4	4.8			
K	3.4	3.8			
L	3.2	3.4			
М	0.6	0.8			
N	17.0	18.0			
0	9.5	10.1			



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