



**CHENMKO ENTERPRISE CO.,LTD**

*Halogens free devices*

**SINGLE PHASE SILICON RECTIFIER**

VOLTAGE RANGE 50 - 1000 Volts CURRENT 4 Amperes

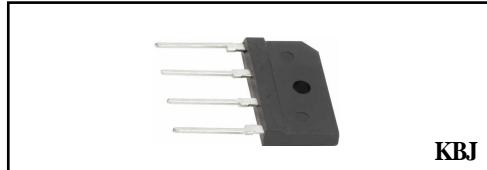
**KBJ4AGP  
THRU  
KBJ4MGP**

**FEATURES**

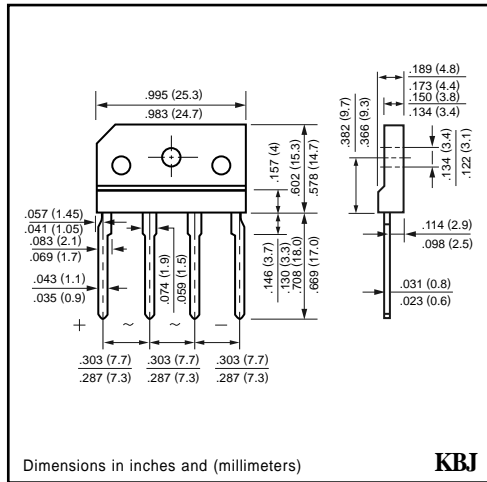
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Idea for printed circuit board
- \* Glass passivated chip junctions
- \* Low power loss
- \* Low forward voltage, high current capability
- \* High surge current capability
- \* High temperature soldering guaranteed : 260°C/10 seconds at terminals

**MECHANICAL DATA**

**Case:** KBJ molded plastic  
**Terminals:** Lead solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked



**KBJ**



**KBJ**

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

**MAXIMUM RATINGS** ( At TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	KBJ4BGP	KBJ4AGP	KBJ4DGP	KBJ4GGP	KBJ4JGP	KBJ4KGP	KBJ4MGP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	Io	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150							Amps
Rating for fusing ( t > 1 mSec, t < 8.3 mSec )	I <sup>2</sup> t	93							A <sup>2</sup> Sec
Typical Junction capacitance per leg ( NOTE 1 )	CJ	45							pF
Typical thermal resistance ( NOTE 2 )	R θJ-C	4.0							°C / W
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150							°C

**ELECTRICAL CHARACTERISTICS** ( At TA = 25°C unless otherwise noted )

CHARACTERISTICS	SYMBOL	KBJ4BGP	KBJ4AGP	KBJ4DGP	KBJ4GGP	KBJ4JGP	KBJ4KGP	KBJ4MGP	UNITS
Maximum Instantaneous Forward Voltage at 4.0 A DC	VF	1.0							Volts
Maximum DC reverse current at rated DC blocking voltage per leg	TA = 25°C	5.0							uAmps
	TA = 125°C	500							

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts  
 2. Thermal resistance from junction to case and device mounted on 50 X 50 X 1.6 mm copper heatsink.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

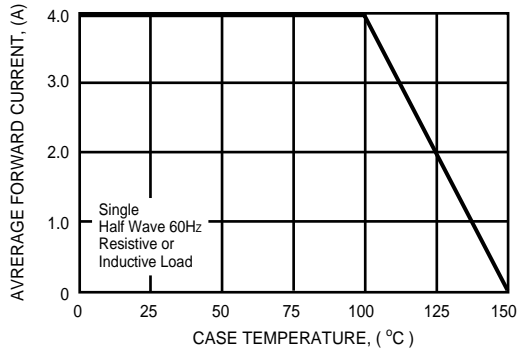


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

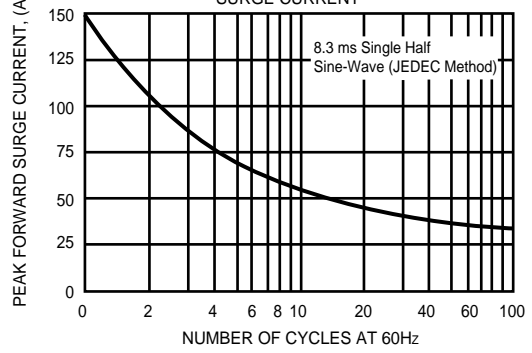


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

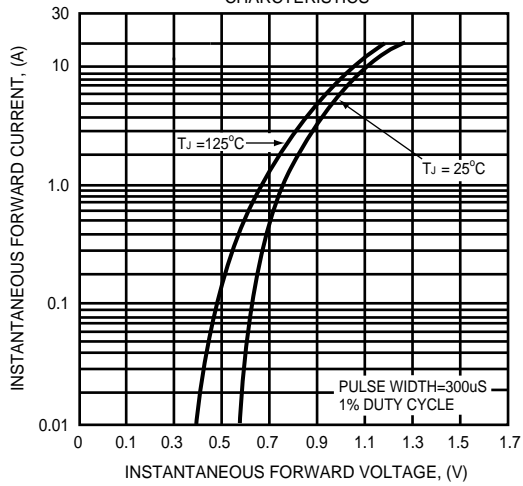


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

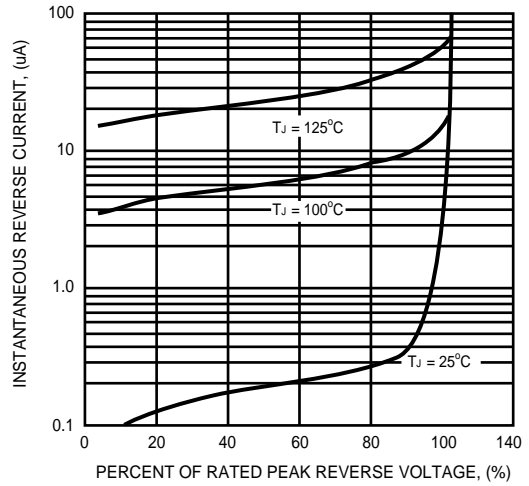


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

