



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SINGLE PHASE SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 4 Amperes

**KBJ4APT
THRU
KBJ4MPT**

FEATURES

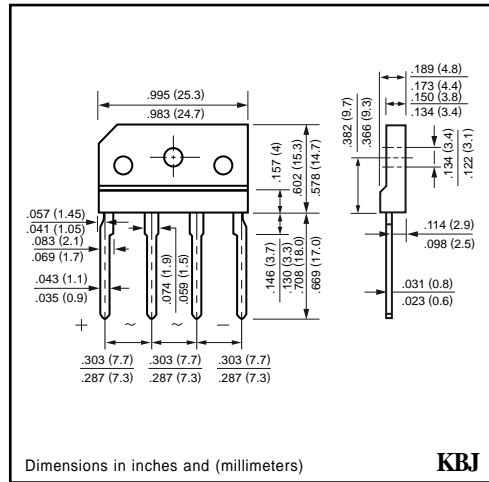
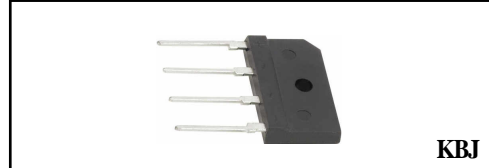
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Idea for printed circuit board
- * Glass passivated chip junctions
- * Low power loss
- * Low forward voltage, high current capability
- * High surge current capability
- * High temperature soldering guaranteed : 260°C/10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

MECHANICAL DATA

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

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	KBJ4BPT	KBJ4APT	KBJ4DPT	KBJ4GPT	KBJ4JPT	KBJ4KPT	KBJ4MPT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	I _O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150							Amps
Rating for fusing (t > 1 mSec, t < 8.3 mSec)	I ² t	93							A ² Sec
Typical Junction capacitance per leg (NOTE 1)	C _J	45							pF
Typical thermal resistance (NOTE 2)	R _{θJ-C}	4.0							°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

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

CHARACTERISTICS	SYMBOL	KBJ4BPT	KBJ4APT	KBJ4DPT	KBJ4GPT	KBJ4JPT	KBJ4KPT	KBJ4MPT	UNITS
Maximum Instantaneous Forward Voltage at 4.0 A DC	V _F	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

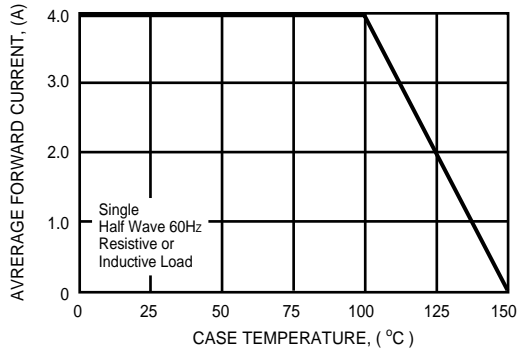


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

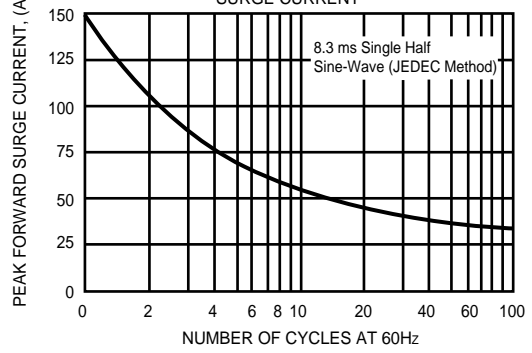


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

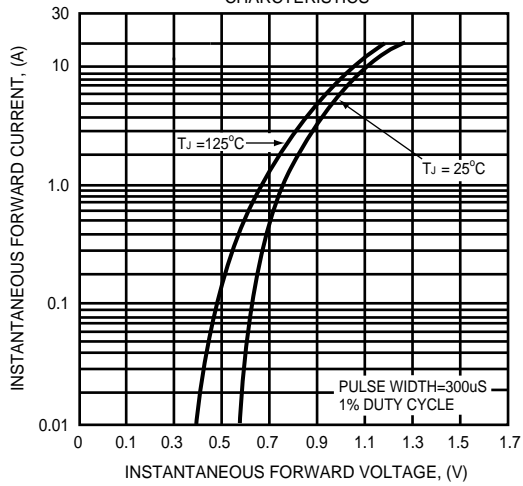


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

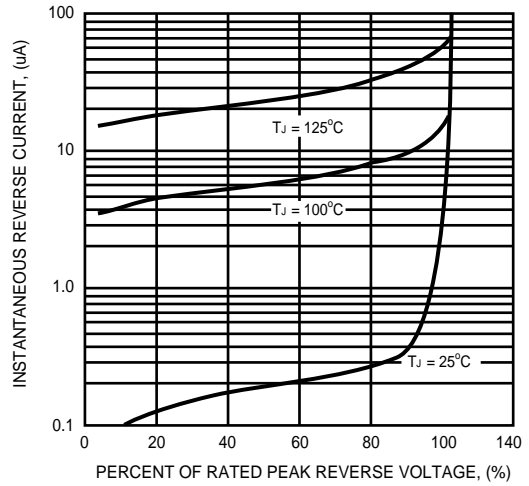


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

