承　認　書
APPROVE SHEET

客　　戶
CUSTOMER　　科技　　股份有限公司

客 戶 料 號
CUSTOMER
PART No.

零 件 名 稱
DESCRIPTION　　KBJ4KPT

使 用 機 種
APPLICATION

承 認 者 章
APPROVED No.

版　　本
REVISION　　O

力勤股份有限公司
CHENMKO ENTERPRISE CO.,LTD

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送 件 日 期: 2023年 10 月 17 日

CHENMKO ENTERPRISE CO.,LTD

Lead free devices

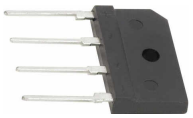
SINGLE PHASE SILICON RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 4 Amperes

KBJ4APT
THRU
KBJ4MPT

FEATURES

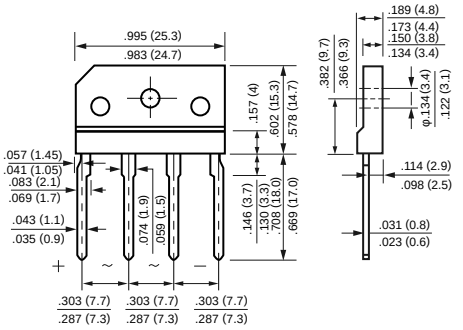
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Idea for printed circuit board
* Glass passivated chip junctions
* Low power loss
* Low forward voltage, high current capability
* High surge current capability
* High temperature soldering guaranteed : 260°C/10 seconds at terminals
* MARKING:KBJ408



KBJ

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

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 RATINGES (At T_A = 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^2t	93							A^2Sec
Typical Junction capacitance per leg (NOTE 1)	C_J	45							pF
Typical thermal resistance (NOTE 2)	R θ_{J-C}	4.0							°C / W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

ELECTRICAL CHARACTERISTICS (At T_A = 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	T_A = 25°C	I_R	5.0							uAmps
	T_A = 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.

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RATING CHARACTERISTIC CURVES (KBJ4APT THRU KBJ4MPT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

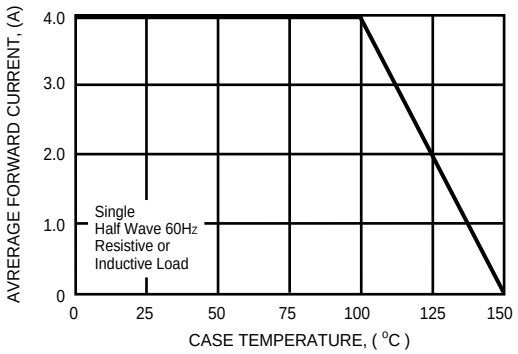

FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

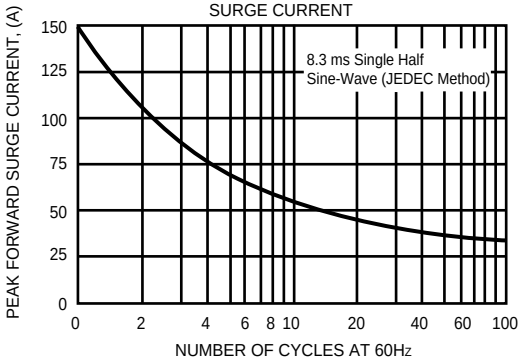

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

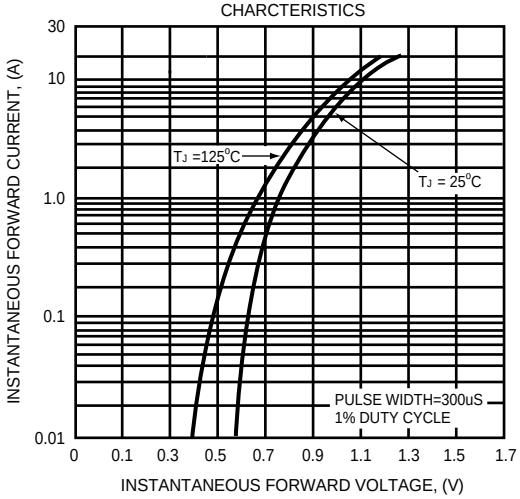

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

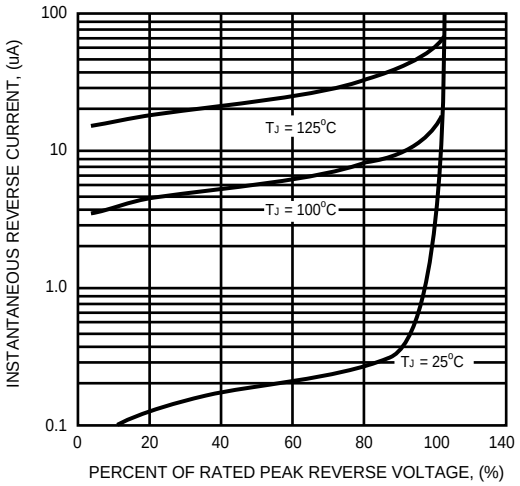

FIG. 5 - TYPICAL JUNCTION CAPACITANCE

