

Silicon Bridge Rectifiers

KBJ6AA--KBJ6MA

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 170 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208



Lead-free

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBJ 6AA	KBJ 6BA	KBJ 6DA	KBJ 6GA	KBJ 6JA	KBJ 6KA	KBJ 6MA	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward Output current @T _C =110°C	I _{F(AV)}	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	170							A

Thermal Characteristics

Characteristic	Symbol	KBJ 6AA	KBJ 6BA	KBJ 6DA	KBJ 6GA	KBJ 6JA	KBJ 6KA	KBJ 6MA	UNITS
Typical junction capacitance per element (NOTE1)	C _J	45							p F
Typical thermal resistance (NOTE2)	R _{θJC}	2.2							°C/W
Operating junction temperature range	T _J	- 55 ---- + 150							°C
Storage temperature range	T _{STG}	- 55 ---- + 150							°C

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBJ 6AA	KBJ 6BA	KBJ 6DA	KBJ 6GA	KBJ 6JA	KBJ 6KA	KBJ 6MA	UNITS
Maximum instantaneous forward voltage @3.0A	V _F	1.1							V
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =125°C	I _R	10.0 1.0							μ A mA

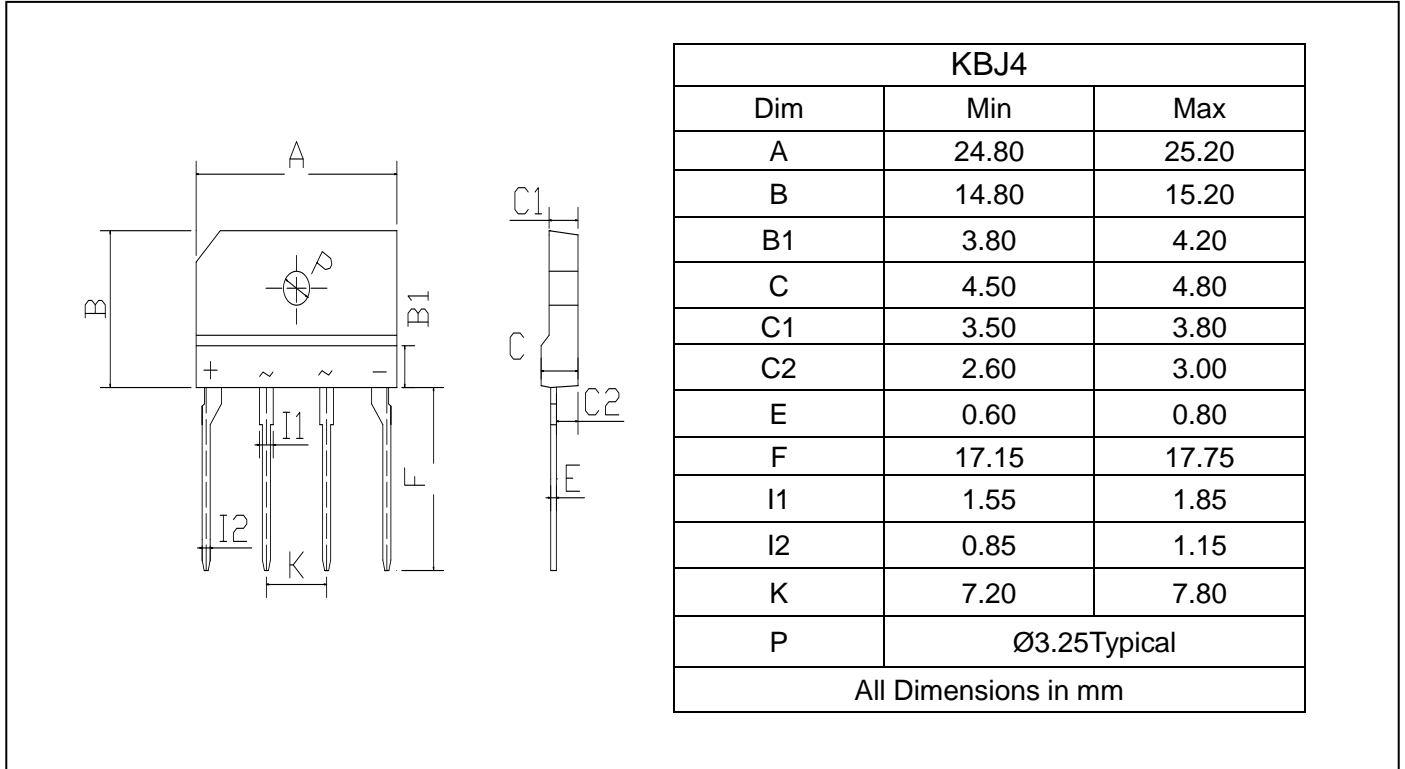
NOTES: 1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC

2. Dev ice mounted on 300mm X 300mm X 1.6mm cu Plate heatsink.

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PACKAGE OUTLINE DIMENSIONS



PACKAGE INFORMATION

Device	Package	Shipping
KBJ6AA--KBJ6MA	KBJ4	250Units/Box



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FIG.1 – PEAK FORWARD SURGE CURRENT

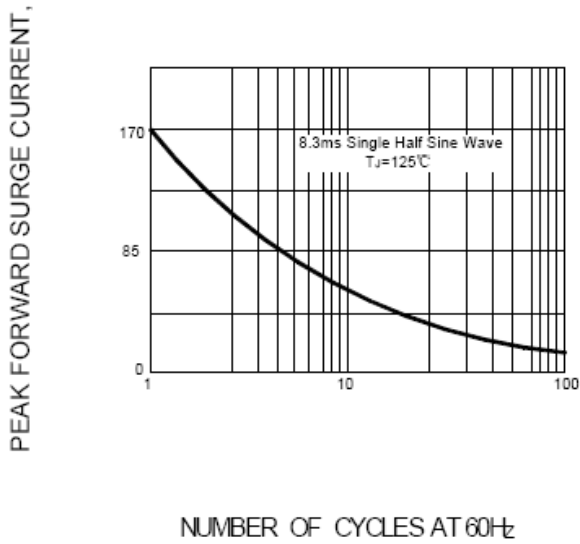


FIG.2 – FORWARD DERATING CURVE

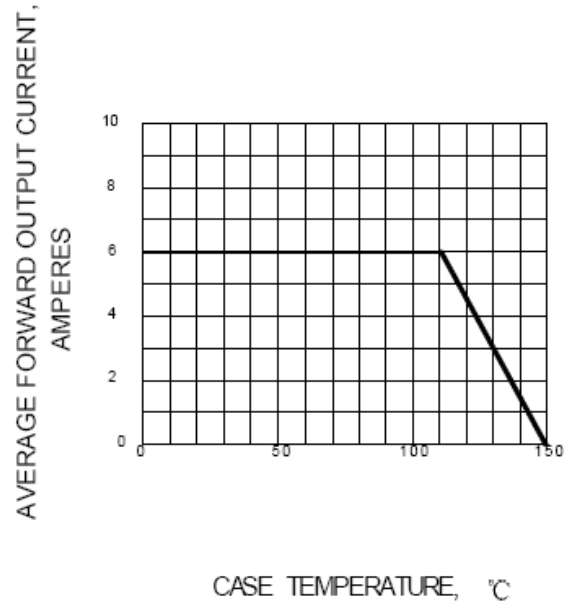


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

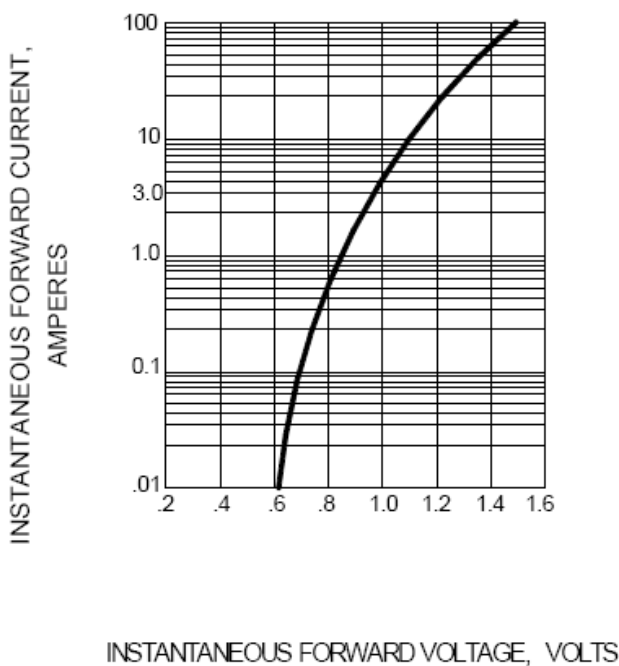


FIG.4 – TYPICAL JUNCTION CAPACITANCE

