

# Silicon Bridge Rectifiers

# KBJ2A--KBJ2M

## FEATURES

- Rating to 1000V PRV
- Surge overload rating to 50 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



## MECHANICAL DATA

- Polarity: Symbols molded on body
- Mounting position: Any

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

Characteristic	Symbol	KBJ2A	KBJ2B	KBJ2D	KBJ2G	KBJ2J	KBJ2K	KBJ2M	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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	50.0							A

## Thermal Characteristics

Characteristic	Symbol	KBJ2A	KBJ2B	KBJ2D	KBJ2G	KBJ2J	KBJ2K	KBJ2M	UNITS
Typical junction capacitance per element	$C_J$	45							p F
Typical thermal resistance	$R_{\theta JC}$	2.2							$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	- 55 ---- + 150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 ---- + 150							$^\circ\text{C}$

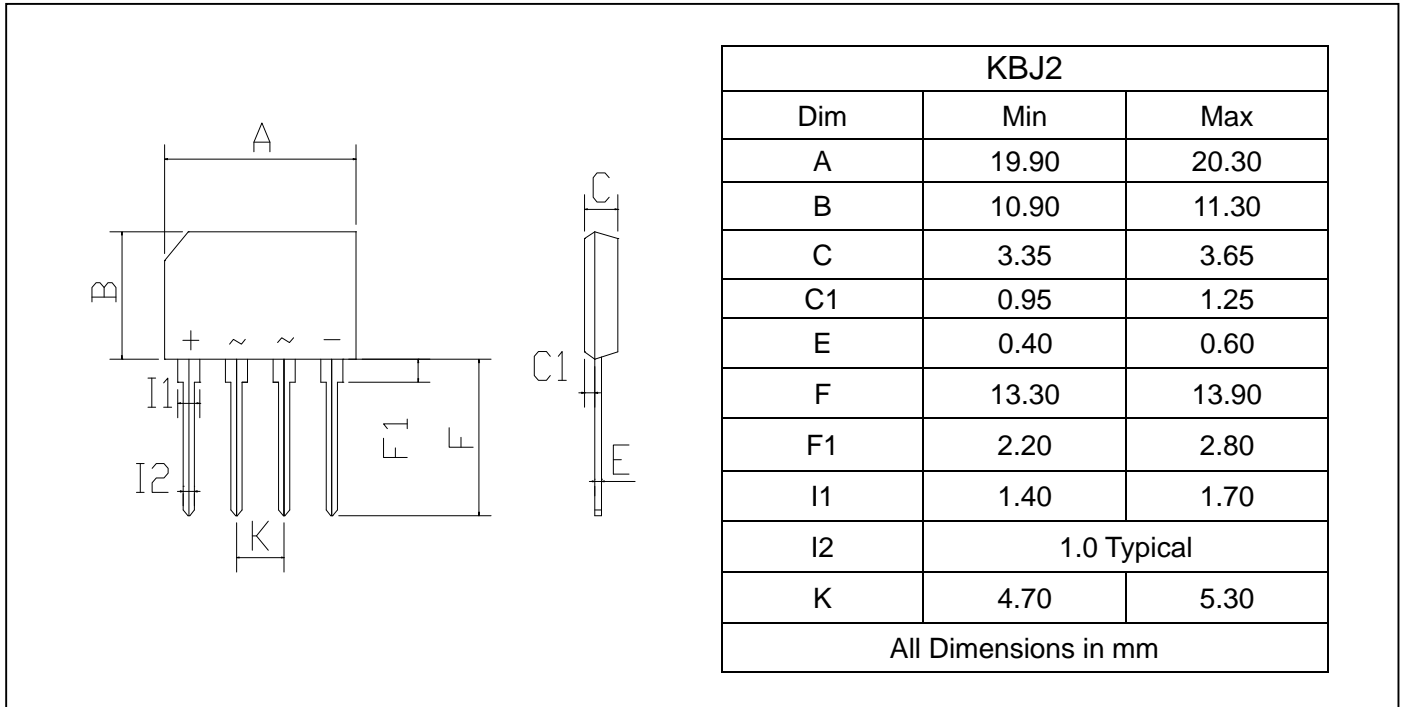
## Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	KBJ2A	KBJ2B	KBJ2D	KBJ2G	KBJ2J	KBJ2K	KBJ2M	UNITS
Maximum instantaneous forward voltage @1.0A	$V_F$	1.0							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	10.0 1.0							$\mu\text{ A mA}$

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**PACKAGE OUTLINE DIMENSIONS**



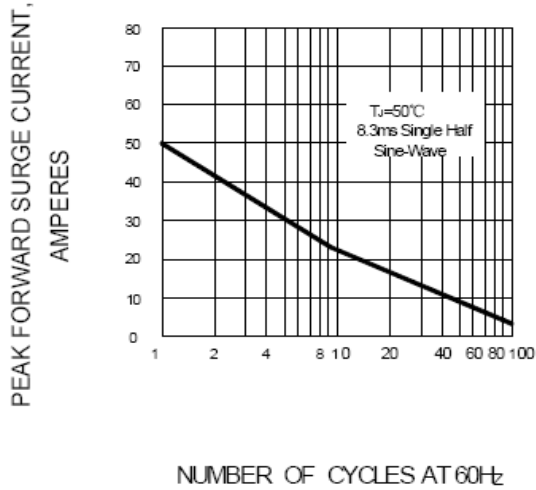
**PACKAGE INFORMATION**

Device	Package	Shipping
KBJ2A--KBJ2M	KBJ2	500 Units/Box

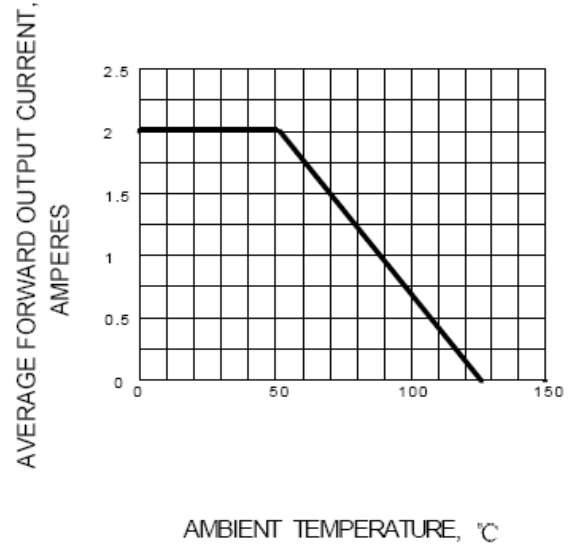
**Silicon Bridge Rectifiers**

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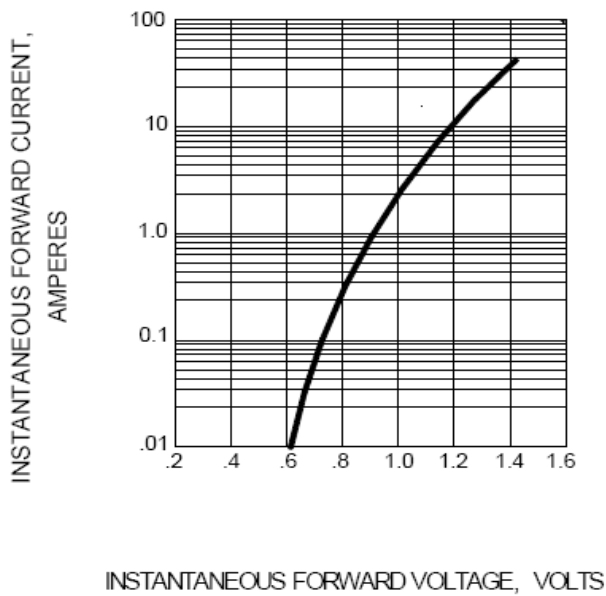
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

