

Silicon Bridge Rectifiers

KBJ6005--KBJ610

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 150 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
- Glass passivated chip junctions



Lead-free

MECHANICAL DATA

- Polarity: Symbols molded on body
- Weight: 0.23 ounces, 6.6 grams

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

Characteristic	Symbol	KBJ6005	KBJ601	KBJ602	KBJ 604	KBJ606	KBJ608	KBJ610	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 =100°C	I _{F(AV)}	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	150.0							A

Thermal Characteristics

Characteristic	Symbol	KBJ6005	KBJ601	KBJ602	KBJ 604	KBJ606	KBJ608	KBJ610	UNITS
Typical junction capacitance per element	C _J	55							p F
Typical thermal resistance	R _{θJC}	1.8							°C/W
Operating junction temperature range	T _J	- 55 ---- + 150							°C
Storage temperature range	T _{STG}	- 55 ---- + 150							°C

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

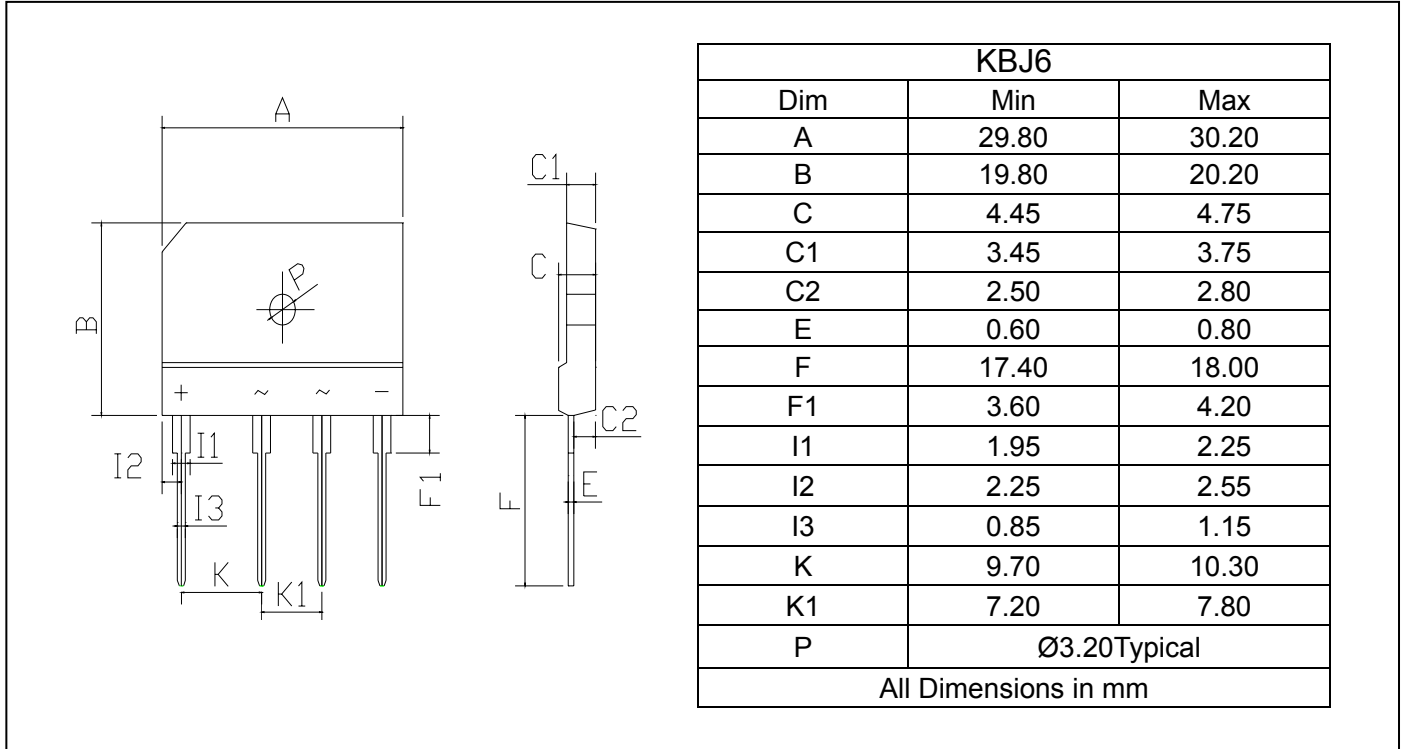
Characteristic	Symbol	KBJ6005	KBJ601	KBJ602	KBJ 604	KBJ606	KBJ608	KBJ610	UNITS
Maximum instantaneous forward voltage @3.0A	V _F	1.0							V
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =100°C	I _R	10.0 1.0							μ A mA



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PACKAGE OUTLINE DIMENSIONS



PACKAGE INFORMATION

Device	Package	Shipping
KBJ6005--KBJ610	KBJ6	250 Units/Box



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FIG.1 – PEAK FORWARD SURGE CURRENT

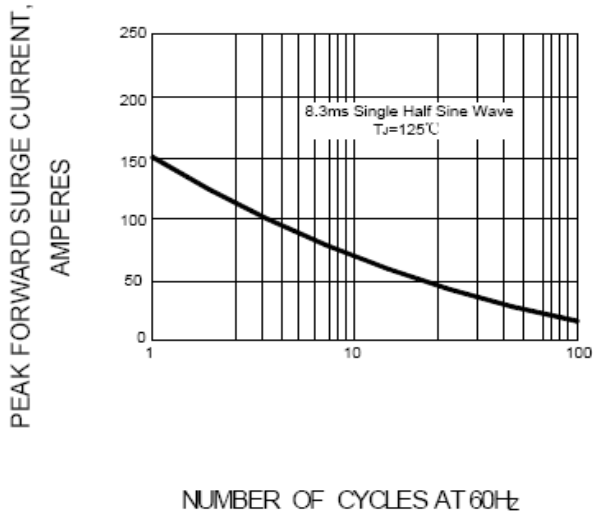


FIG.2 – FORWARD DERATING CURVE

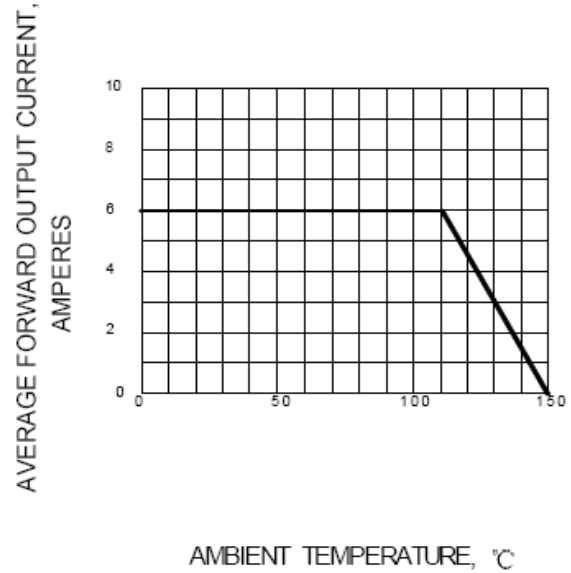


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

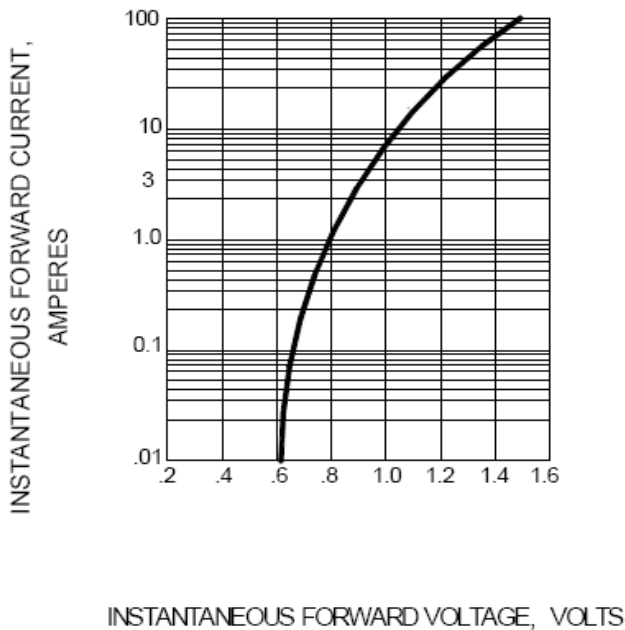


FIG.4 – TYPICAL JUNCTION CAPACITANCE

