

Silicon Bridge Rectifiers

GBJ20005--GBJ2010

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 200 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

MECHANICAL DATA

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

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

Characteristic	Symbol	GBJ20005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	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	I _{F(AV)}	20							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I _{FSM}	200							A

Thermal Characteristics

Characteristic	Symbol	GBJ20005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	UNITS
Typical junction capacitance per element (Note 1)	C _J	60							p F
Typical thermal resistance	R _{θJC}	0.8							°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	GBJ20005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	UNITS
Maximum instantaneous forward voltage @10A	V _F	1.0							V
Maximum reverse current @T _A =25 °C at rated DC blocking voltage @T _A =125°C	I _R	10 500							μ A

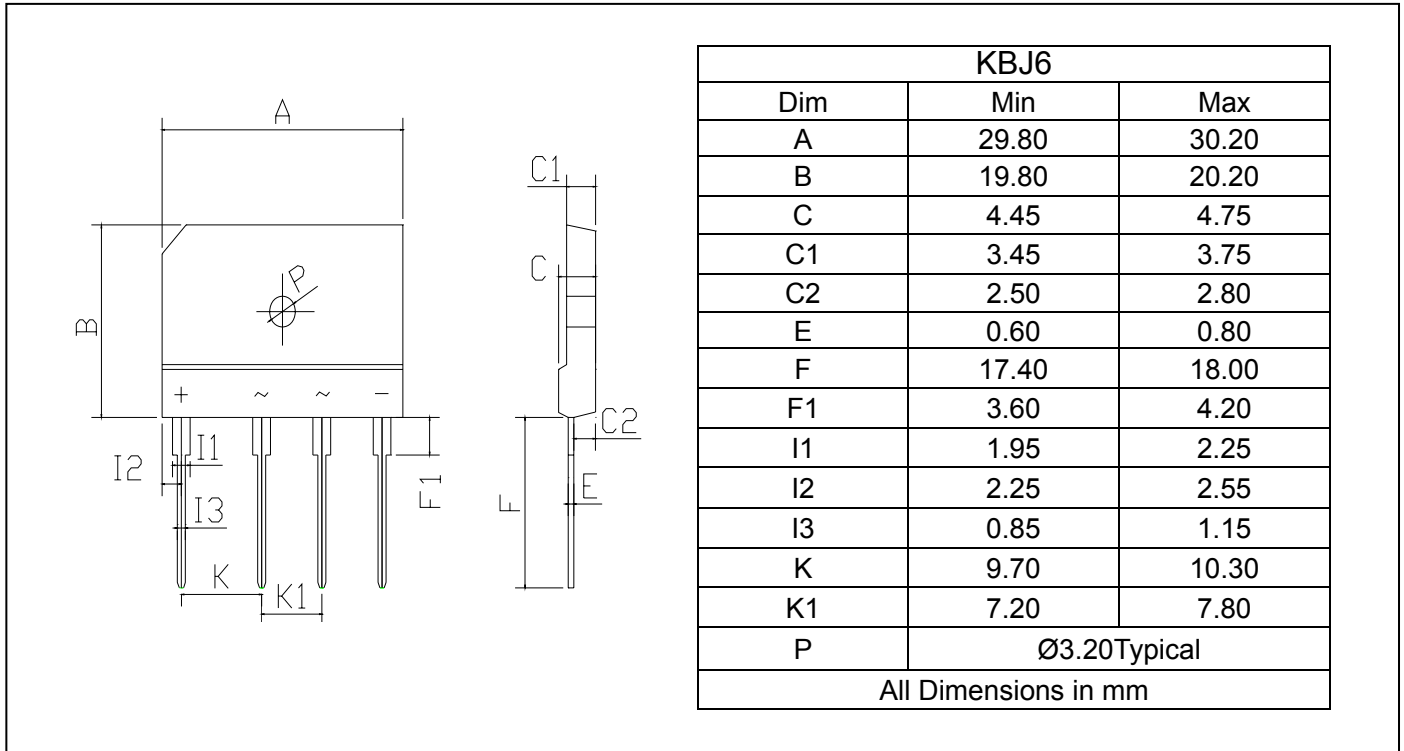
NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



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PACKAGE OUTLINE DIMENSIONS



PACKAGE INFORMATION

Device	Package	Shipping
GBJ20005--GBJ2010	KBJ6	250 Units/Box



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FIG.1 -- PEAK FORWARD SURGE CURRENT

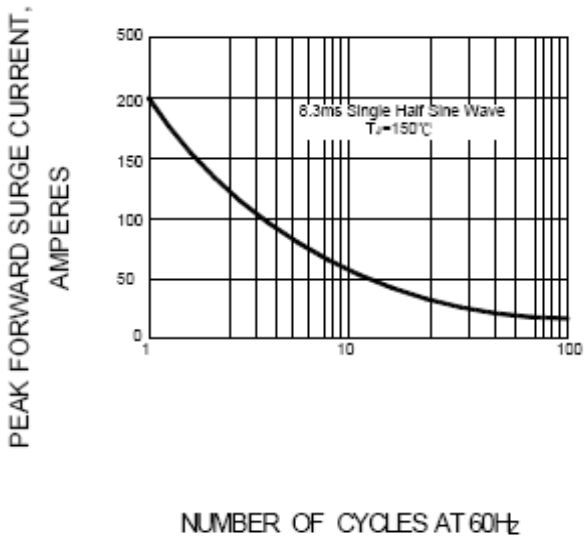


FIG.2 -- FORWARD DERATING CURVE

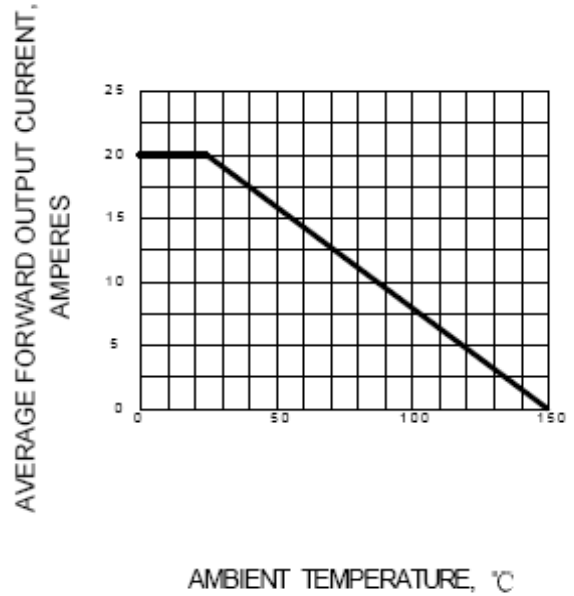


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

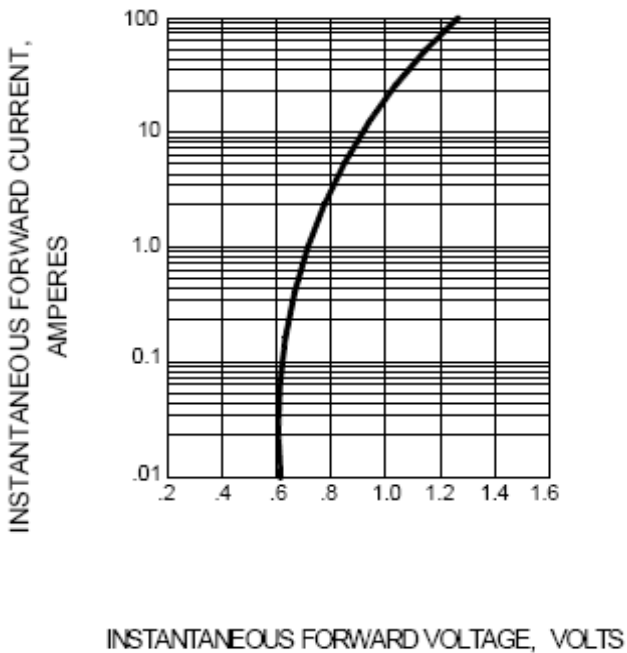


FIG.4 -- TYPICAL JUNCTION CAPACITANCE

