

Silicon Bridge Rectifiers

GBJ25005--GBJ2510

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 350 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
- Weight: 0.23 ounces,6.6 grams
- Mounting position: Any

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

Characteristic	Symbol	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	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 @ $T_C=98^\circ\text{C}$	$I_{F(AV)}$	25							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	350							A

Thermal Characteristics

Characteristic	Symbol	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	UNITS
Typical junction capacitance per element (Note 1)	C_J	85							pF
Typical thermal resistance(Note 2)	$R_{\theta JC}$	0.6							$^\circ\text{C}/\text{W}$
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	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	UNITS
Maximum instantaneous forward voltage @12.5A	V_F	1.0							V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	10.0 350							μA

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

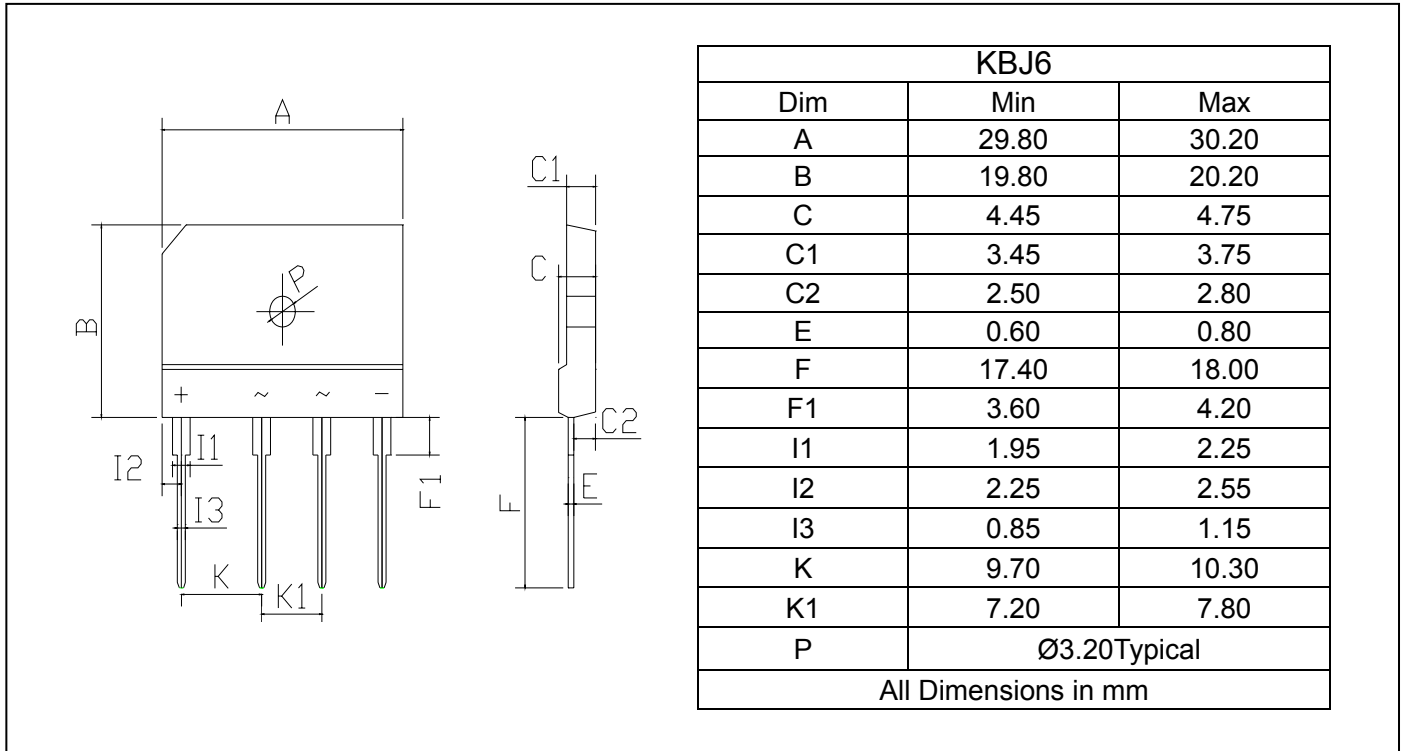
2.Unit case mounted on Al plate heat sink.



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PACKAGE OUTLINE DIMENSIONS



PACKAGE INFORMATION

Device	Package	Shipping
GBJ25005--GBJ2510	KBJ6	250 Units/Box



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FIG.1 – PEAK FORWARD SURGE CURRENT

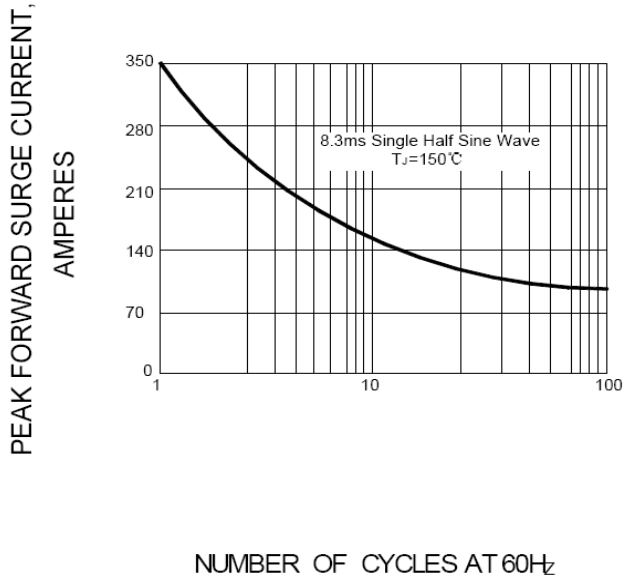


FIG.2 – FORWARD DERATING CURVE

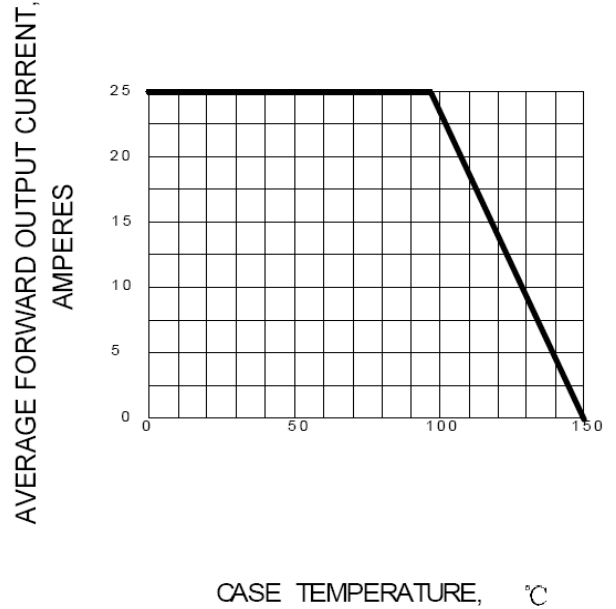


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

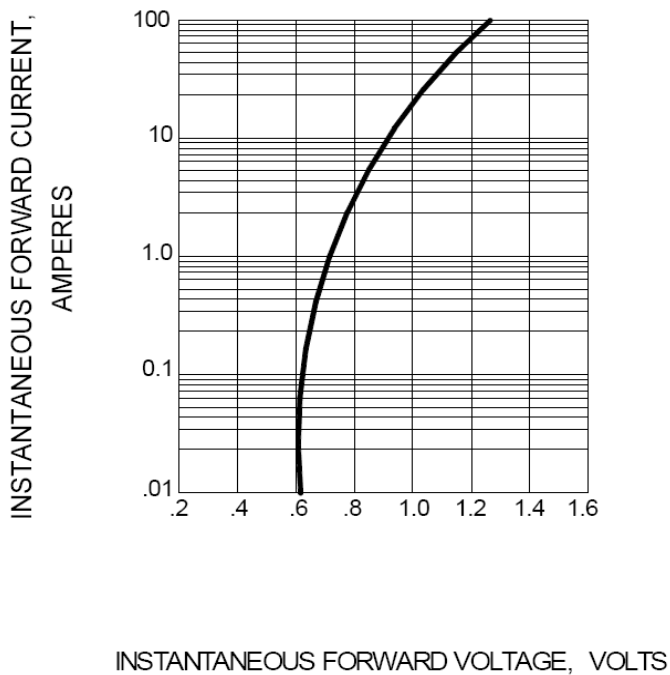


FIG.4 – TYPICAL JUNCTION CAPACITANCE

