

SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 10.0 A

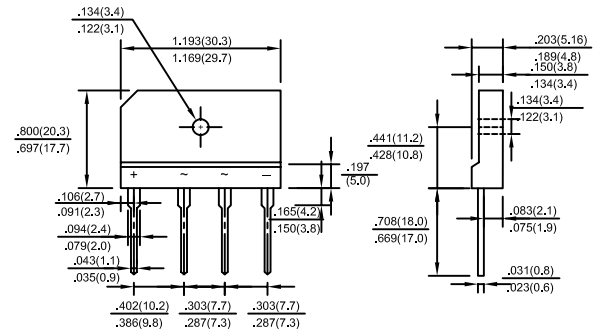
FEATURES

- ◇ 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

MECHANICAL DATA

- ◇ Polarity: Symbols molded on body
- ◇ Weight: 0.23 ounces, 6.6 grams
- ◇ Mounting position: Any

KBJ



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		KBJ 10A	KBJ 10B	KBJ 10D	KBJ 10G	KBJ 10J	KBJ 10K	KBJ 10M	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 @ $T_A = 110^\circ\text{C}$	$I_{F(AV)}$	10.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	200.0							A
Maximum instantaneous forward voltage at 5.0 A	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							μA mA
Typical junction capacitance per element	C_J	55							pF
Typical thermal resistance	$R_{\theta JC}$	1.4							$^\circ\text{C/W}$
Operating junction temperature range	T_J	- 55 ---- + 150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ---- + 150							$^\circ\text{C}$

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

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2. Device mounted on 300mm X 300mm X 1.6mm cu Plate heatsink.

FIG.1 – PEAK FORWARD SURGE CURRENT

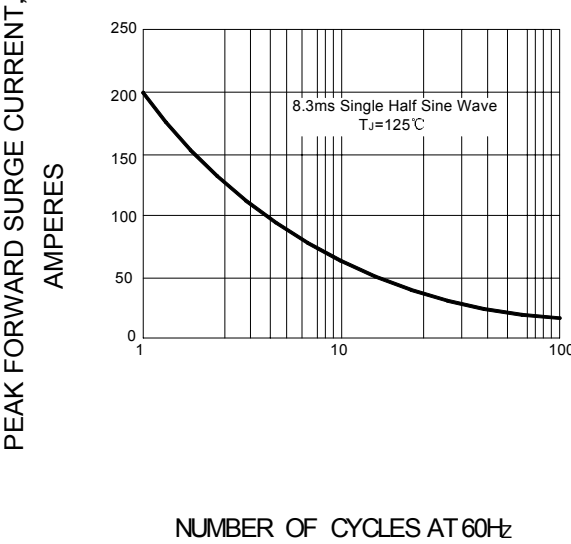


FIG.2 -- FORWARD DERATING CURVE

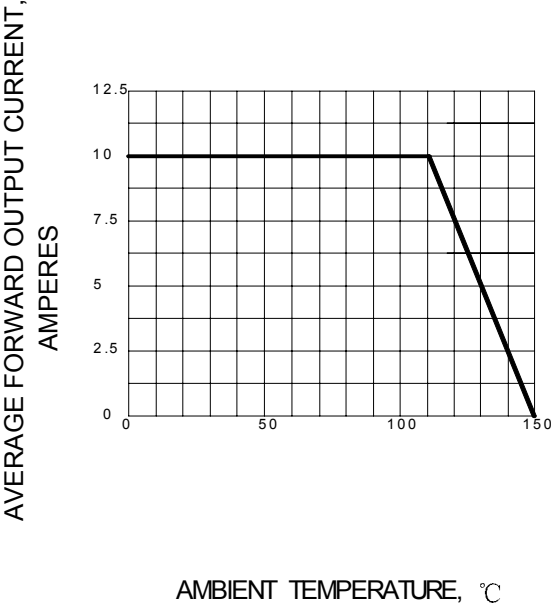


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

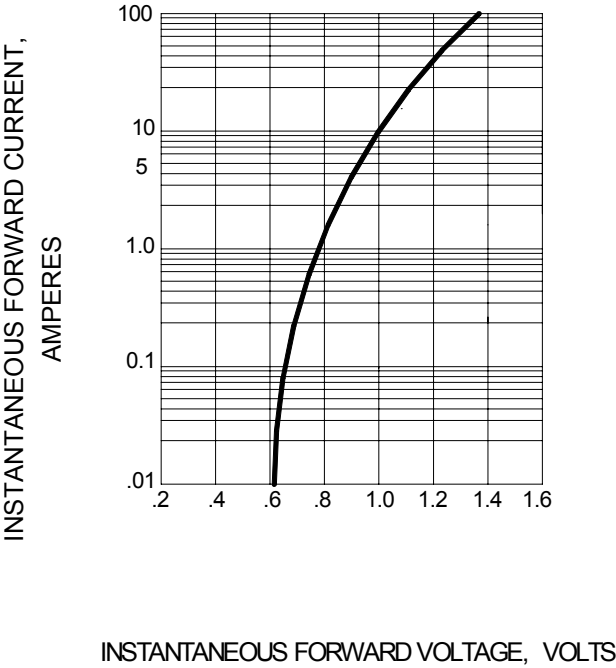


FIG.4 – TYPICAL JUNCTION CAPACITANCE

