

SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 6.0 A

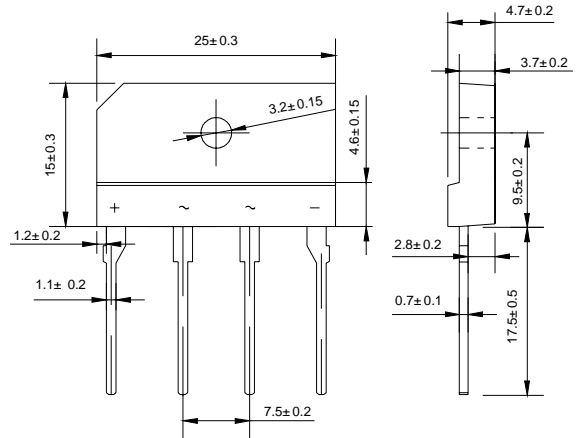
FEATURES

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 170 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: 0.16 ounces, 4.45 grams
- ◇ Mounting position: Any

KBJ4



Dimensions in millimeters

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%.

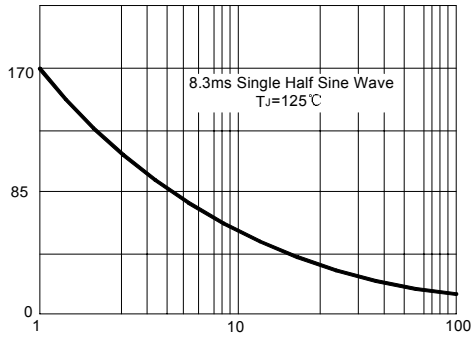
		KBJ 6AA	KBJ 6BA	KBJ 6DA	KBJ 6GA	KBJ 6JA	KBJ 6KA	KBJ 6MA	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward Output current @ $T_C=110^\circ C$	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	170							A
Maximum instantaneous forward voltage at 3.0 A	V_F	1.1							V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=125^\circ C$	I_R	10 1.0							μA mA
Typical junction capacitance per element (NOTE1)	C_J	45							pF
Typical thermal resistance (NOTE2)	$R_{\theta JC}$	2.2							$^\circ C/W$
Operating junction temperature range	T_J	- 55 ---- + 150							$^\circ C$
Storage temperature range	T_{STG}	- 55 ---- + 150							$^\circ C$

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

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

FIG.1 – PEAK FORWARD SURGE CURRENT

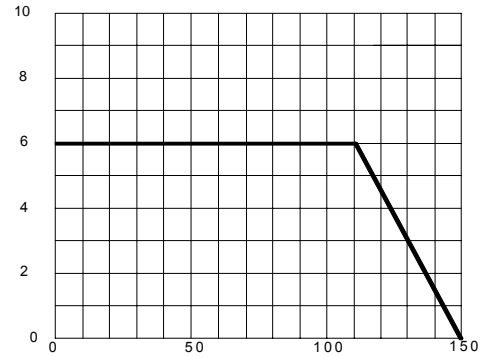
PEAK FORWARD SURGE CURRENT,



NUMBER OF CYCLES AT 60Hz

FIG.2 – FORWARD DERATING CURVE

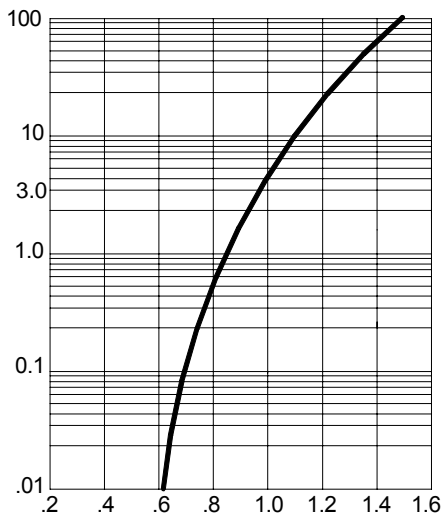
AVERAGE FORWARD OUTPUT CURRENT, AMPERES



CASE TEMPERATURE, °C

FIG.3 – TYPICAL FORWARD CHARACTERISTIC

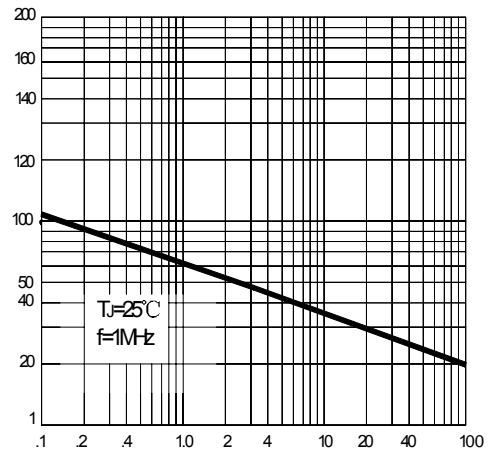
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4 – TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS