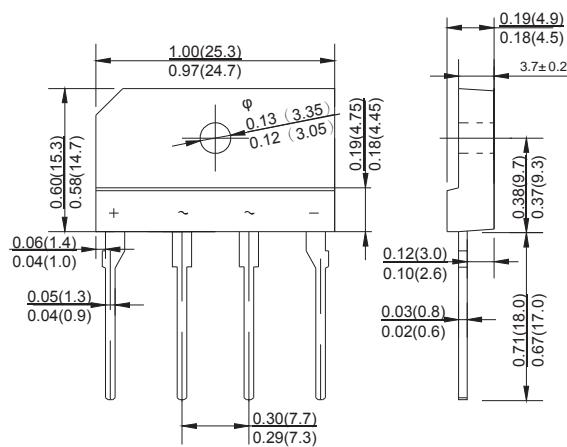


**SILICON BRIDGE RECTIFIER**
**VOLTAGE RANGE: 50 --- 1000 V**  
**CURRENT: 4.0 A**
**FEATURES**

- 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

**MECHANICAL DATA**

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

**KBJ4**

**MAXIMUM RATINGS AND CHARACTERISTICS**

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

		KBJ 4A	KBJ 4B	KBJ 4D	KBJ 4G	KBJ 4J	KBJ 4K	KBJ 4M	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 @ $T_A=100^\circ\text{C}$	$I_{F(AV)}$	4.0						A	
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	150.0						A	
Maximum instantaneous forward voltage at 2.0 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						$\mu\text{A}$ mA	
Typical junction capacitance per element	$C_J$	45						pF	
Typical thermal resistance	$R_{\theta JC}$	2.2						$^\circ\text{C}/\text{W}$	
Operating junction temperature range	$T_J$	- 55 ---- + 150						$^\circ\text{C}$	
Storage temperature range	$T_{STG}$	- 55 ---- + 150						$^\circ\text{C}$	

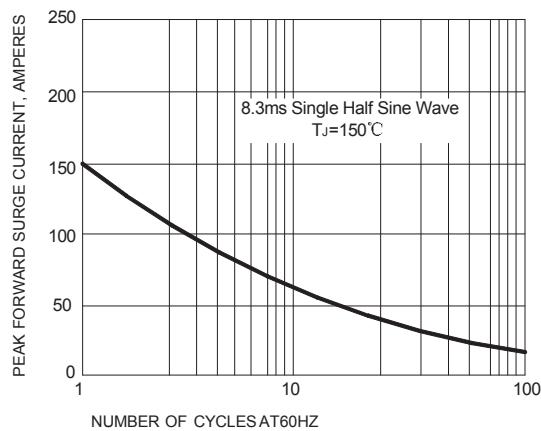
NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC

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

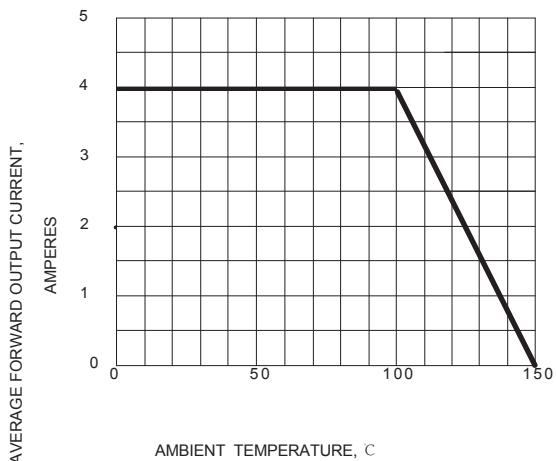


## RATINGS AND CHARACTERISTIC CURVES

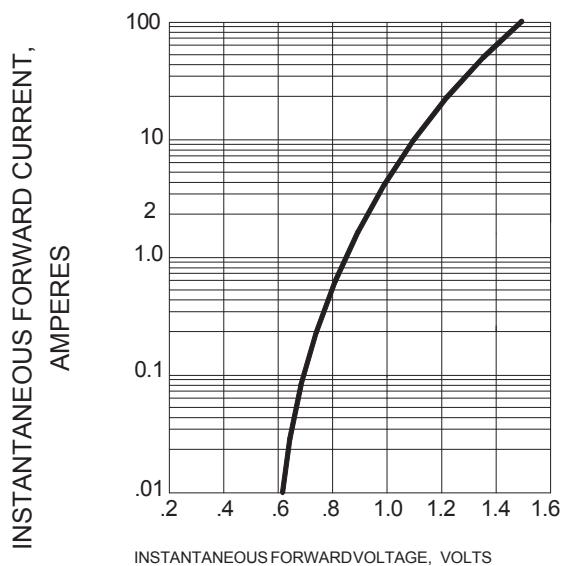
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 -- TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 -- TYPICAL JUNCTION CAPACITANCE**

