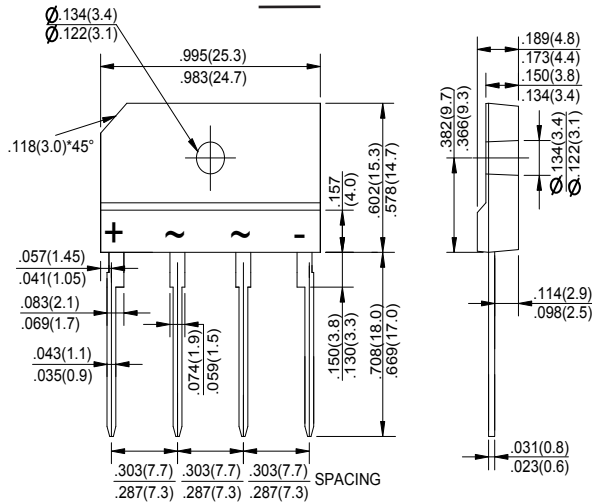


KBJ



Dimensions in inches and (millimeters)

FEATURES

- ◆ Rating to 1000V PRV
- ◆ Ideal for printed circuit board
- ◆ Low forward voltage drop, high current capability
- ◆ Reliable low cost construction utilizing molded plastic
- ◆ The plastic material has U/L flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	KBJ 6005	KBJ 601	KBJ 602	KBJ 604	KBJ 606	KBJ 608	KBJ 610	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS	
Maximum average forward (with heatsink NOTE 2) Rectified current @ $T_C=100^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	6.0						2.8		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	170.0								Amps
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	120								A ² s
Maximum forward voltage at 3.0A DC	V_F	1.0								Volts
Maximum forward voltage at 6.0A DC	V_F	1.1								Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	10						10		μA
		500						500		μA
Typical Junction Capacitance (Note 1)	C_J	55								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	1.8								$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-55 to +150								$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150								$^\circ\text{C}$

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

2. Device mounted on 75mm*75mm*1.6mm cu plate heatsink.

3. The typical data above is for reference only (典型值仅供参考).

RATINGS AND CHARACTERISTIC CURVES KBJ6005 THRU KBJ610

FIG.1-FORWARD CURRENT DERATING CURVE

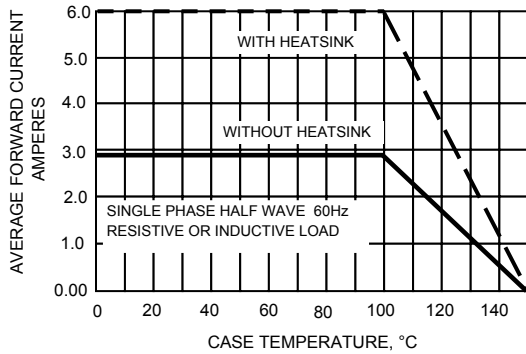


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

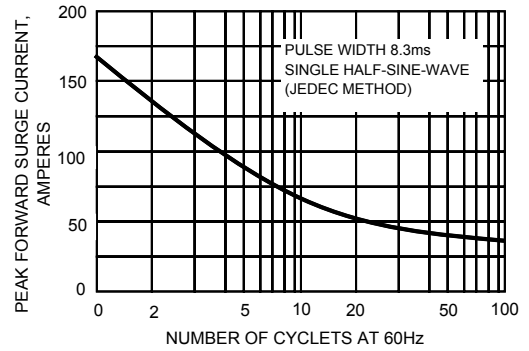


FIG.3-TYPICAL JUNCTION CAPACITANCE

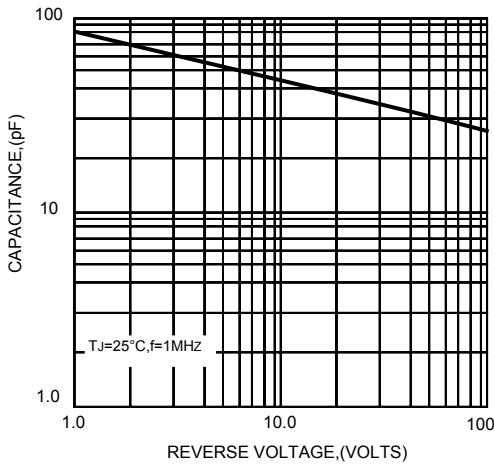


FIG.4-TYPICAL FORWARD CHARACTERISTICS

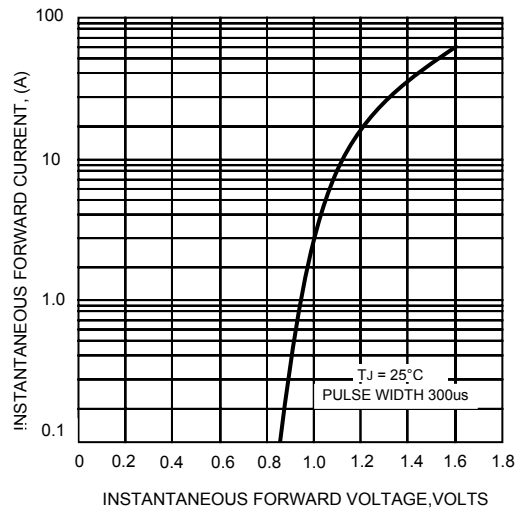
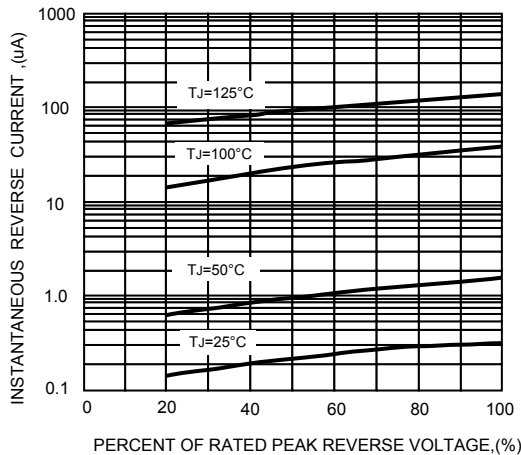


FIG.5-TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!