

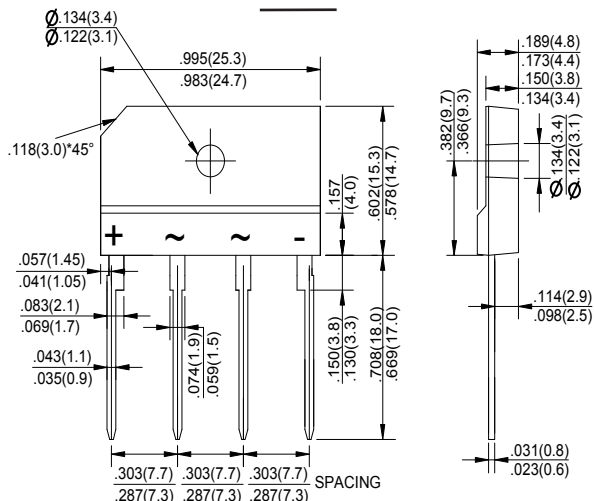


# KBJ4005 THRU KBJ410

## GLASS PASSIVATED BRIDGE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 4.0 Amperes

### KBJ



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Surge overload rating -135 amperes peak
- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ Plastic material has U/L flammability classification 94V-0
- ◆ Mounting position: Any

### 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 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	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 @ $T_C=100^\circ C$ (without heatsink)	$I_{(AV)}$	4.0 2.4						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	135.0						Amps	
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	75.63						$A^2s$	
Maximum forward voltage at 2.0A DC	$V_F$	1.0						Volts	
Maximum forward voltage at 4.0A DC	$V_F$	1.1						Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^\circ C$ 10						$\mu A$	
		$T_A=125^\circ C$ 500						$\mu A$	
Typical Junction Capacitance (Note 1)	$C_J$	45						pF	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	2.2						$^\circ C/W$	
Operating junction temperature range	$T_J$	-55 to +150						$^\circ C$	
storage temperature range	$T_{STG}$	-55 to +150						$^\circ C$	

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).



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# RATINGS AND CHARACTERISTIC CURVES KBJ4005 THRU KBJ410

FIG.1-FORWARD CURRENT DERATING CURVE

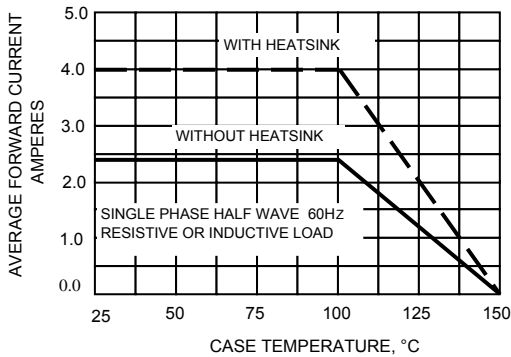


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

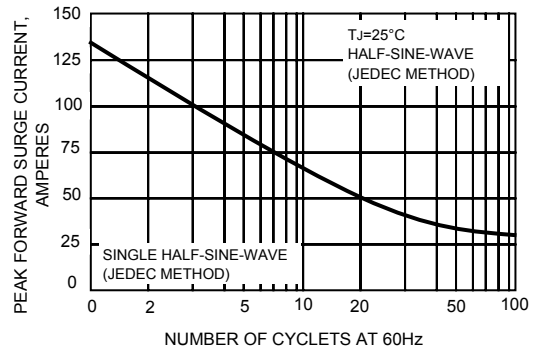


FIG.3-TYPICAL FORWARD CHARACTERISTICS

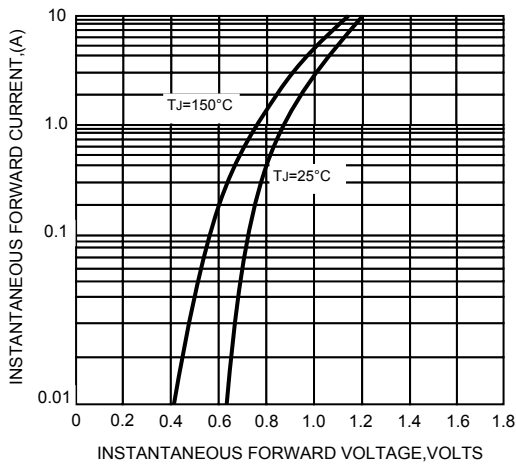


FIG.4-TYPICAL REVERSE CHARACTERISTICS

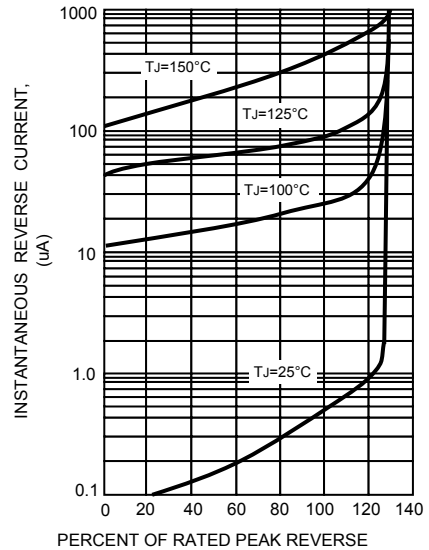
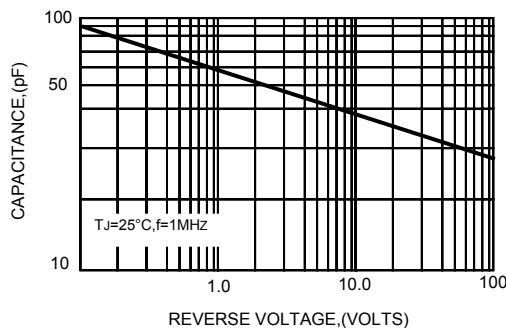


FIG.5-TYPICAL JUNCTION CAPACITANCE



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



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