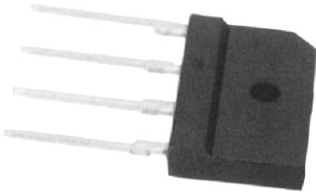


# RS4005G thru RS410G KBJ4005G thru KBJ410G

## SINGLE-PHASE SILICON BRIDGE



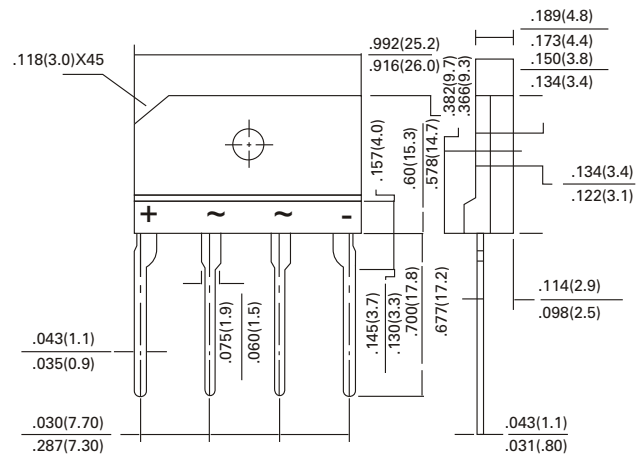
**CHENG-YI  
ELECTRONIC**



### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has Underwriters Laboratory flammability classification 94V-0
- Lead solderable per MIL-STD-202 Method 208
- Surge overload rating to 120 Amperes peak
- Polarity symbols molded on body
- Mounting position: Any
- Weight: 0.16 ounce 4.6 grams

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
4.0 Amperes



All Dimensions in inches and (millimeters)

### 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, derate current by 20%.

		RS4005G	RS401G	RS402G	RS404G	RS406G	RS408G	RS410G	UNITS
		KBJ4005G	KBJ401G	KBJ402G	KBJ404G	KBJ406G	KBJ408G	KBJ410G	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Rectified Current @ $T_C=115^\circ\text{C}$	$V_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC METHOD)	$I_{FSM}$	120							A
Maximum DC Forward Voltage drop per element at 2.0A DC	$V_F$	1.0							V
Maximum DC Reverse Current at rated @ $T_A=250^\circ\text{C}$ DC Blocking Voltage per element @ $T_A=125^\circ\text{C}$	$I_R$	5							$\mu\text{A}$
		500							$\mu\text{A}$
Typical Junction Capacitance ( Note 1)	$C_J$	40							pF
Typical Thermal Resistance ( Note 2)	$R_{\theta JC}$	5.5							$^\circ\text{C/W}$
Operating 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 1.0 MHz and applied reverse voltage of 4.0V DC 2. Thermal Resistance Junction to Case

# RS4005G thru RS410G KBJ4005G thru KBJ410G

## SINGLE-PHASE SILICON BRIDGE



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### RATING AND CHARACTERISTICS CURVES KBJ4005G THRU KBJ410G RS4005G THRU RS410G

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

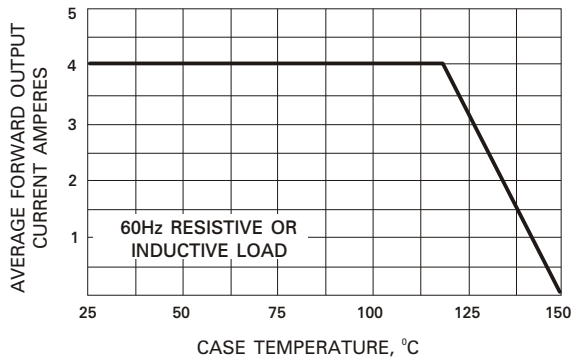


Fig.4 - MAXIMUM NON-REPETITIVE SURGE CURRENT

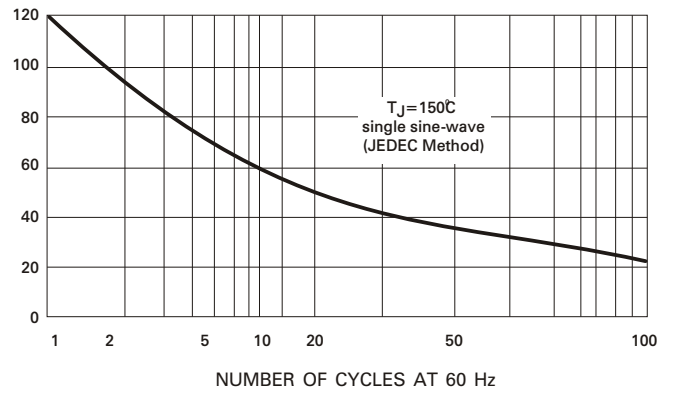


Fig.2 - TYPICAL FORWARD CHARACTERISTICS

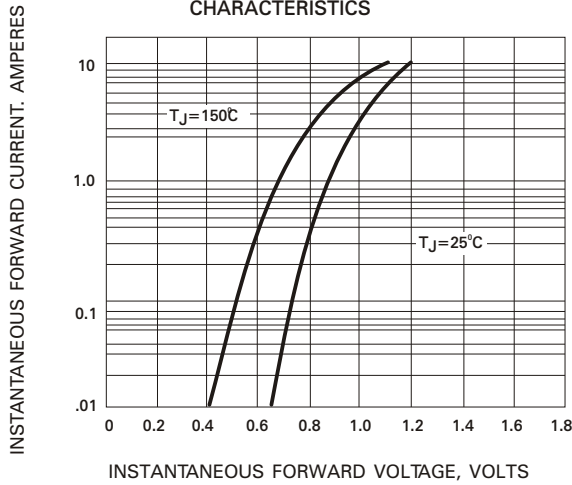


Fig.5 - TYPICAL REVERSE CHARACTERISTICS

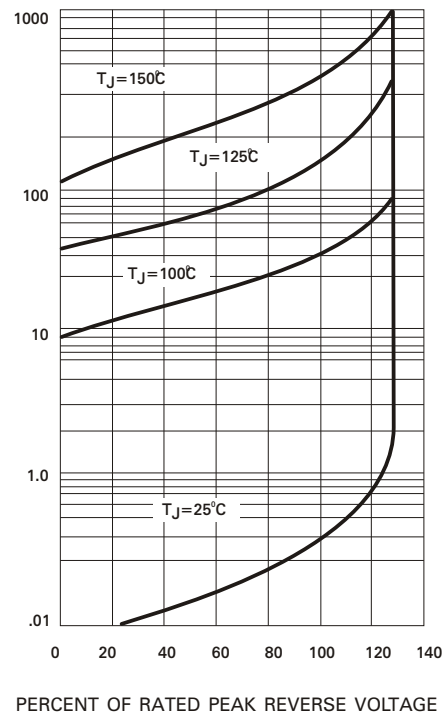


Fig.3 - TYPICAL JUNCTION CAPACITANCE

