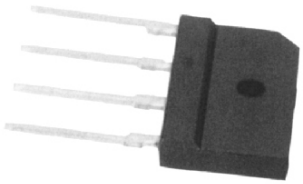
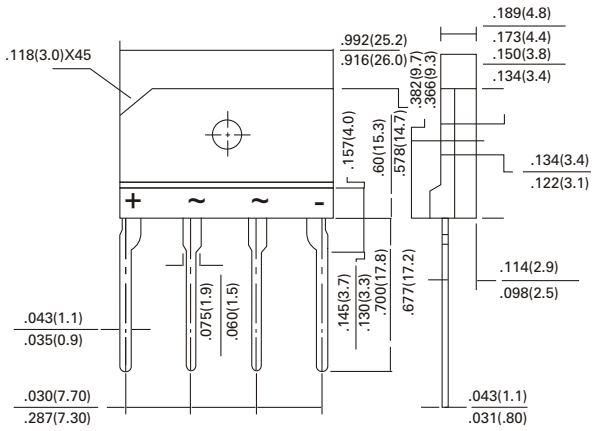
RS4005G thru RS410G
KBJ4005G thru KBJ410G

SINGLE-PHASE SILICON BRIDGE

CHENG-YI
ELECTRONIC



VOLTAGE RANGE
50 TO 1000 VOLTS
CURRENT
4.0 Amperes



All Dimensions in inches and (millimeters)

FEATURES

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

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 KBJ4005G	RS401G KBJ401G	RS402G KBJ402G	RS404G KBJ404G	RS406G KBJ406G	RS408G KBJ408G	RS410G KBJ410G	UNITS
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°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°C DC Blocking Voltage per element @ T_A=125°C	I_R	5 500							μA μA
Typical Junction Capacitance (Note 1)	C_J	40							pF
Typical Thermal Resistance (Note 2)	R θ JC	5.5							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°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

CHENG-YI
ELECTRONIC

RATING AND CHARACTERISTICS CURVES
KBJ4005G THRU KBJ410G
RS4005G THRU RS410G

Fig.1 - MAXIMUM FORWARD SURGE CURRENT

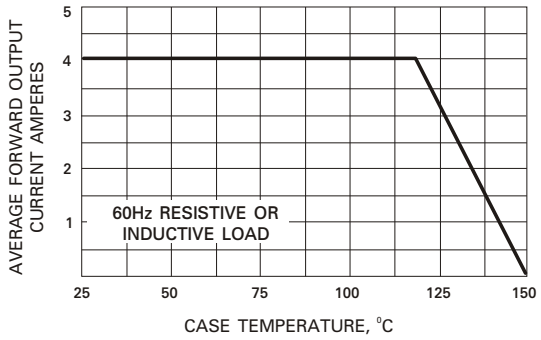


Fig.2 - TYPICAL FORWARD CHARACTERISTICS

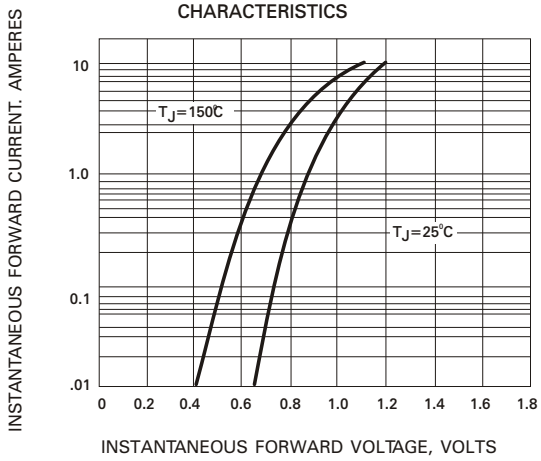


Fig.3 - TYPICAL JUNCTION CAPACITANCE

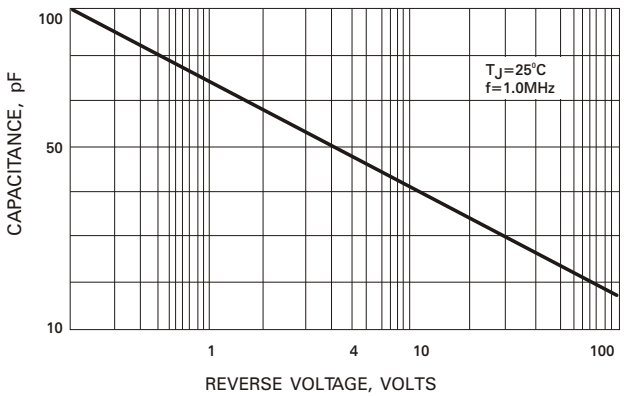


Fig.4 - MAXIMUM NON-REPETITIVE SURGE CURRENT

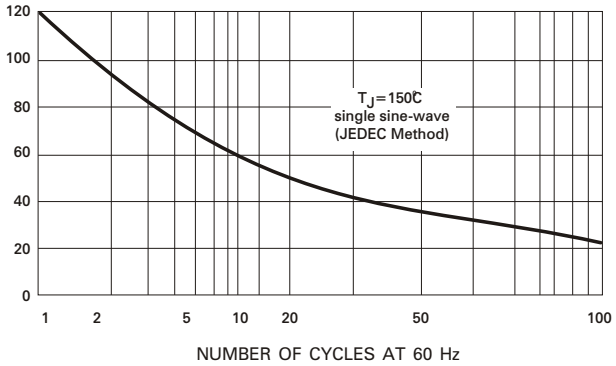


Fig.5 - TYPICAL REVERSE CHARACTERISTICS