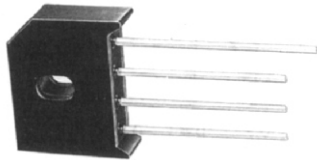


# RS6 SERIES

## SINGLE-PHASE SILICON BRIDGE



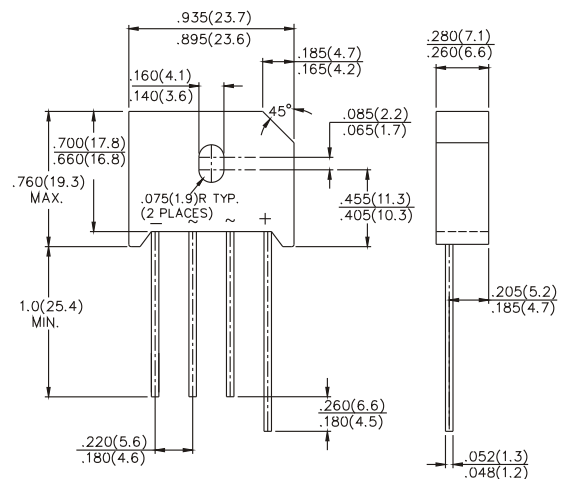
# CHENG-YI ELECTRONIC



## FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has underwriters laboratory Flammability Classification 94V-0
- Surge overload rating: 200 amperes peak
- Mounting Torque: 5 In. lb. max
- UL recognized file # E149311
- Lead solderable per MIL-STD-202 method 208
- Electrically isolated base 1800Volts

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
6.0 Amperes



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60 Hz. For capacitive load, derate current by 20%.

		RS6005	RS601	RS602	RS604	RS606	RS608	RS610	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	$V_{DC}$	60	100	200	400	600	800	1000	V
Maximum Average Forward Output Current @ $T_C=100^{\circ}C$ @ $T_A=65^{\circ}C$	$V_{(AV)}$	6.0 6.0							A A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	200							A
Maximum DC Forward Voltage drop per element at 3.0A DC	$V_F$	1							V
Maximum DC Reverse Current at rated DC Blocking Voltage Per Element @ $T_A=100^{\circ}C$	$I_R$	10 1							$\mu A$ mA
Maximum Thermal Resistance (Note 1)	$R_{\theta JC}$	4.7							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 to +125							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^{\circ}C$

# RS6 SERIES

## SINGLE-PHASE SILICON BRIDGE



CHENG-YI  
ELECTRONIC

RATING AND CHARACTERISTICS CURVES  
RS6 SERIES

Fig.1 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

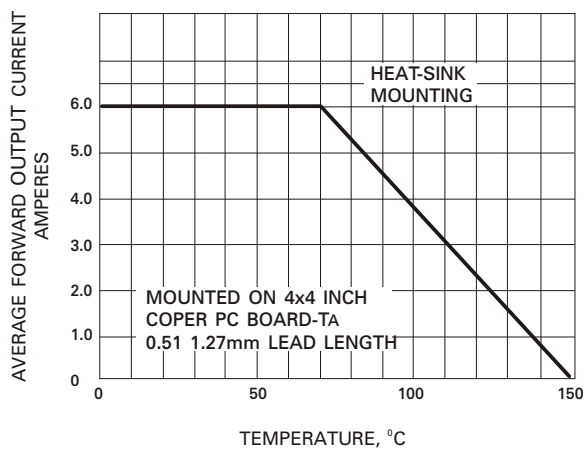


Fig.3 - MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT

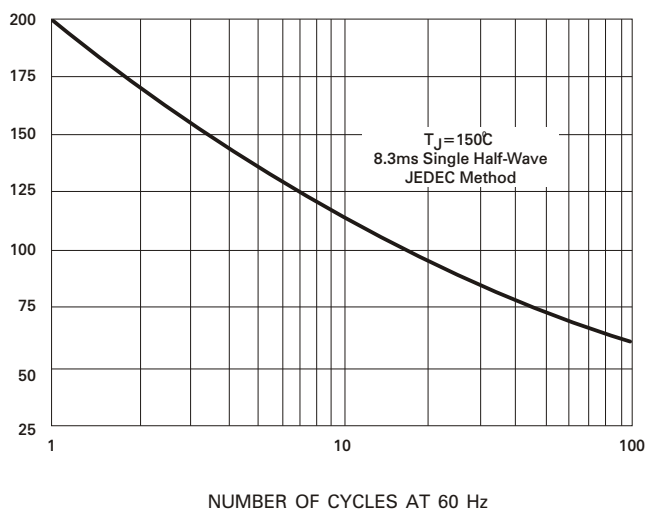


Fig.2 - TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS

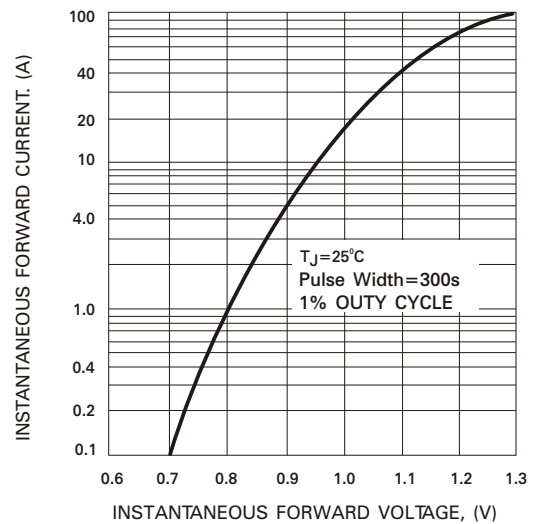


Fig.4 - TYPICAL REVERSE  
CHARACTERISTICS

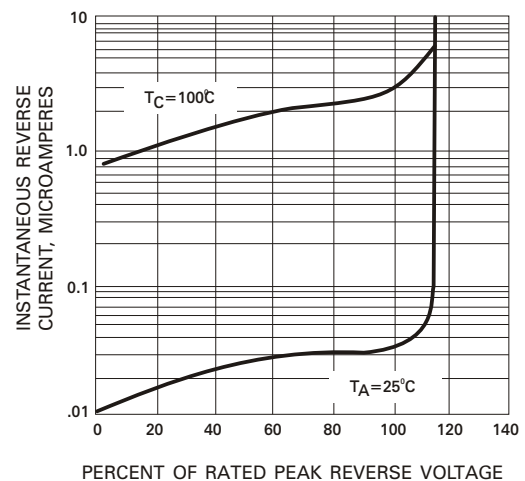


Fig.5 - TYPICAL JUNCTION CAPACITANCE  
PER ELEMENT

