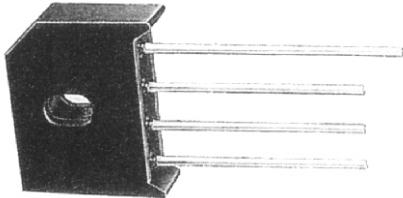


# RS10 SERIES

## SINGLE PHASE SILICON BRIDGE RECTIFIERS



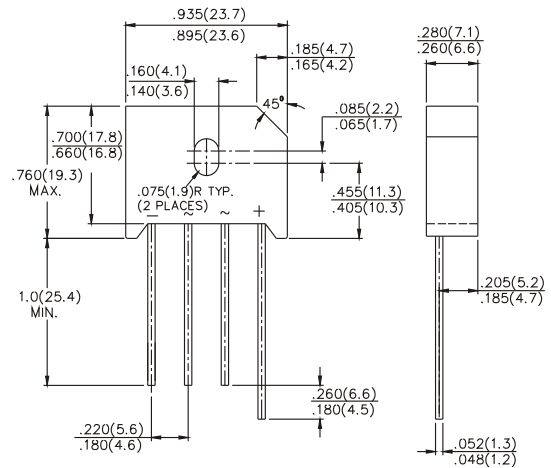
**CHENG-YI  
ELECTRONIC**



### 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 position:Any
- Mounting Torque: 5 In. lb. max

VOLTAGE RANGE  
50 TO 1000 VOLTS  
CURRENT  
10 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%.

|                                                                                                                     |            | RS10005     | RS1001 | RS1002 | RS1004 | RS1006 | RS1008 | RS1010 | 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 Output Current @ $T_C=100^\circ\text{C}$<br>@ $T_A=65^\circ\text{C}$              | $V_{(AV)}$ | 10          |        |        |        |        |        |        | A<br>A              |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)                  | $I_{FSM}$  | 240         |        |        |        |        |        |        | A                   |
| Maximum Instantaneous Forward Voltage Drop Per Element at 10.0A                                                     | $V_F$      | 1.1         |        |        |        |        |        |        | V                   |
| Maximum Reverse Leakage at rated DC Block Voltage Per Element @ $T_A=25^\circ\text{C}$<br>@ $T_C=100^\circ\text{C}$ | $I_R$      | 10<br>100   |        |        |        |        |        |        | $\mu\text{A}$<br>mA |
| Operating Temperature Range                                                                                         | $T_J$      | -65 to +150 |        |        |        |        |        |        | $^\circ\text{C}$    |
| Storage Temperature Range                                                                                           | $T_{STG}$  | -65 to +150 |        |        |        |        |        |        | $^\circ\text{C}$    |

Notes: 1. Thermal Resistance Junction to Case per diode.

# RS10 SERIES

## SINGLE PHASE SILICON BRIDGE RECTIFIERS



CHENG-YI  
ELECTRONIC

### RATING AND CHARACTERISTICS CURVES RS10 SERIES

Fig.1 - DERATING CURVE  
OUTPUT RECTIFIED CURRENT

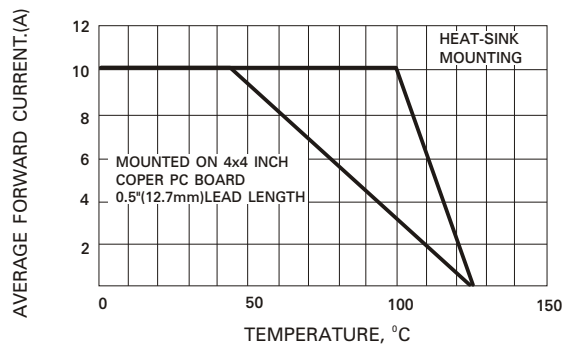


Fig.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

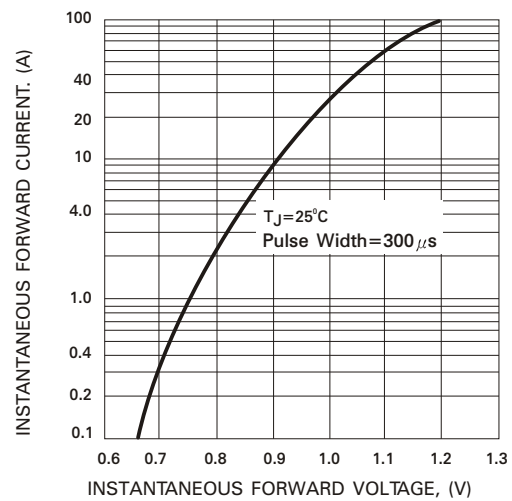


Fig.4 - TYPICAL REVERSE CHARACTERISTICS

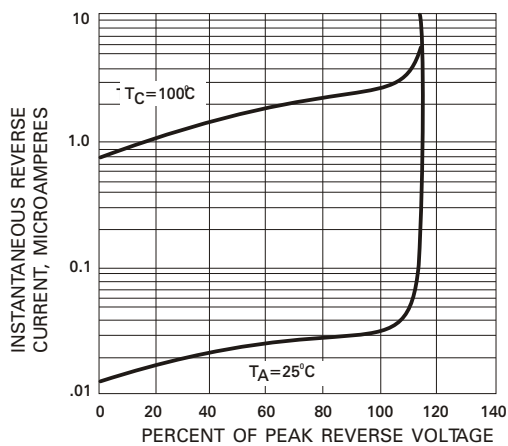


Fig.4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

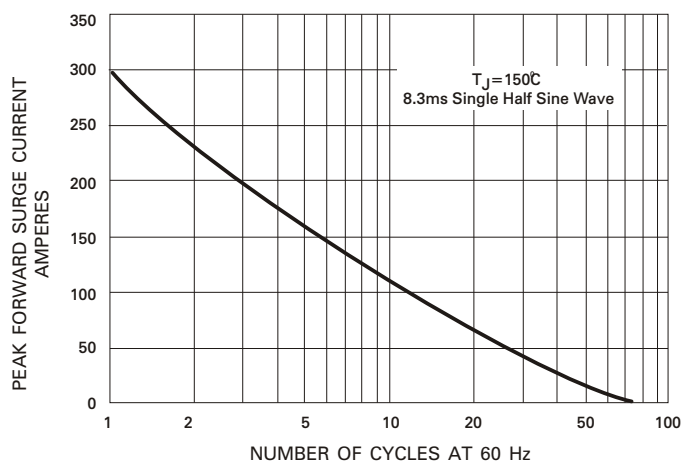


Fig.5 - TYPICAL JUNCTION CAPACITANCE PER ELEMENT

