



# CHENMKO ENTERPRISE CO.,LTD

Lead free devices

## SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 70 - 100 Volts CURRENT 8 Amperes

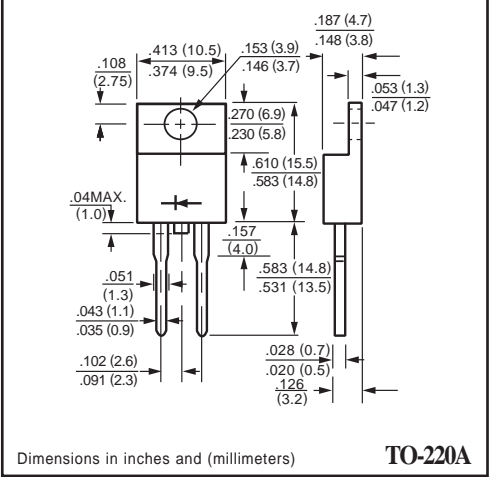
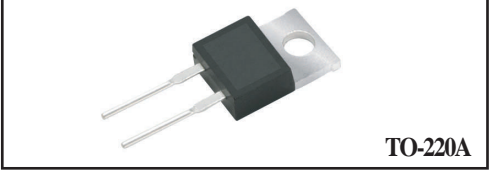
**S08A70PT  
THRU  
S08A100PT**

**FEATURES**

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Metal Silicon junction, majority carrier conduction
- \* Low power loss,high efficiency
- \* High current capability, low forward voltage drop
- \* Guardring for overvoltage protection
- \* For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- \* High temperature soldering in accordance with CECC 802 / Reflow guaranteed

**MECHANICAL DATA**

**Case:** JEDEC TO-220A molded plastic  
**Terminals:** Lead solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Weight:** 1.81 grams ( Approximately )



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

**MAXIMUM RATINGS** ( At TA = 25°C unless otherwise noted )

| RATINGS   | SYMBOL   | S08A70PT    | S08A80PT | S08A90PT | S08A100PT | UNITS  |
|---|----------|-------------|----------|----------|-----------|--------|
| Maximum Recurrent Peak Reverse Voltage  | VRRM     | 70          | 80       | 90       | 100       | Volts  |
| Maximum RMS Voltage   | VRMS     | 49          | 56       | 63       | 70        | Volts  |
| Maximum DC Blocking Voltage   | VDC      | 70          | 80       | 90       | 100       | Volts  |
| Maximum Average Forward Rectified Current   | Io       | 8.0         |          |          |           | Amps   |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM     | 150         |          |          |           | Amps   |
| Typical thermal resistance per leg ( NOTE 1 )   | R θJC    | 5.0         |          |          |           | °C / W |
| Operating and Storage Temperature Range   | TJ, TSTG | -60 to +150 |          |          |           | °C     |

**ELECTRICAL CHARACTERISTICS** ( At TA = 25°C unless otherwise noted )

| CHARACTERISTICS   | SYMBOL     | S08A70PT | S08A80PT | S08A90PT | S08A100PT | UNITS |
|---|------------|----------|----------|----------|-----------|-------|
| Maximum Instantaneous Forward Voltage at 8.0 A DC                                     | VF         | 0.75     |          | 0.85     |           | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage per leg ( NOTE 2 ) | Tc = 25°C  | 5.0      |          |          |           | mAmps |
|   | Tc = 125°C | 50       |          |          |           | mAmps |

NOTES : 1. Thermal resistance from junction to case per leg  
 2. Pulse test : 300 us pulse width, 1% duty cycle  
 3. Suffix " P " = Case Positive, Suffix " R " = Case Negative.

## RATING CHARACTERISTIC CURVES ( S08A70PT THRU S08A100PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

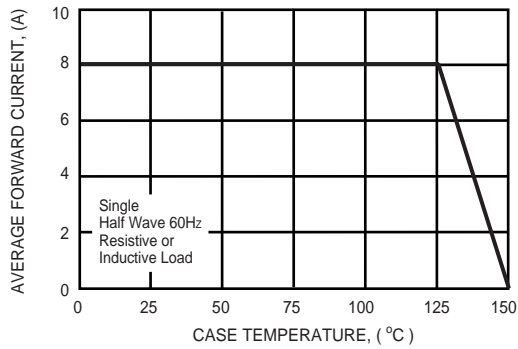


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

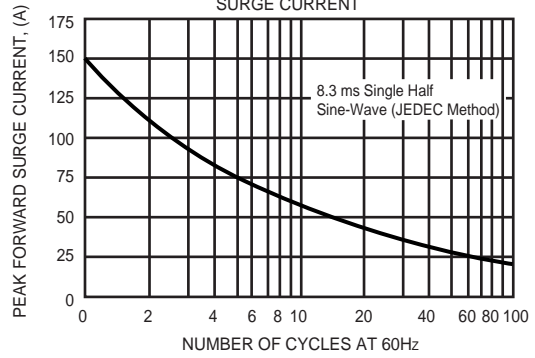


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

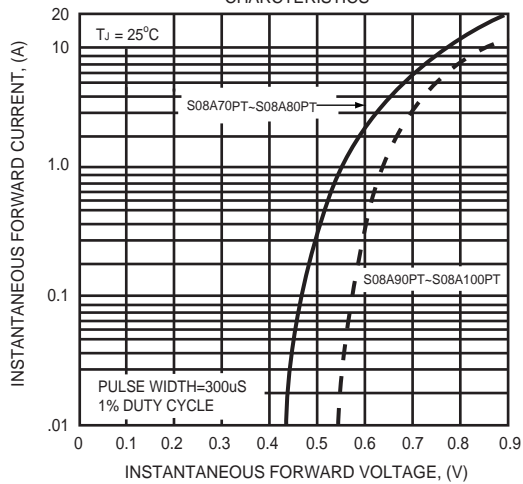


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

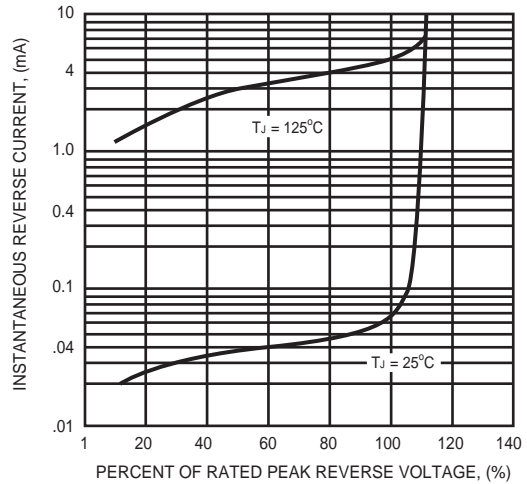


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

