# CHENMKO ENTERPRISE CO.,LTD

**SR220PT THRU SR260PT**

Lead free devices

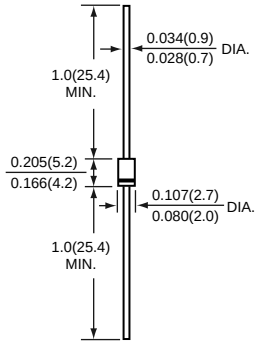
## SCHOTTKY BARRIER RECTIFIER

*VOLTAGE RANGE 20 - 60 Volts  CURRENT 2.0 Amperes*

### FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* Low switching noise
* Low forward voltage drop
* High current capability
* High switching capability
* High reliability
* High surge capability
* High temperature soldering guaranteed : 260°C/10 seconds , 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

DO-41




Dimensions in inches and (millimeters)

DO-41

### MECHANICAL DATA

**Case:** JEDEC DO-41 molded plastic body
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026
**Polarity:** Color band denotes cathode end
**Mounting Position:** Any
**Weight:** 0.33 gram

### 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 RATINGES** ( At $T_A$ = 25°C unless otherwise noted )

| RATINGS | SYMBOL | SR220PT | SR230PT | SR240PT | SR250PT | SR260PT | UNITS |
|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum RMS Voltage | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | Volts |
| Maximum DC Blocking Voltage | $V_{DC}$ | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (SEE FIG.1) | $I_O$ | 2.0 | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$ | 60 | | | | | Amps |
| Typical Junction Capacitance (Note 1) | $C_J$ | 110 | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 50 | | | | | °C / W |
| Operating Temperature Range | $T_J$ | -65 to +125 | | | -65 to +150 | | °C |
| Storage Temperature Range | $T_{STG}$ | -65 to +150 | | | | | °C |

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

| CHARACTERISTICS | | SYMBOL | SR220PT | SR230PT | SR240PT | SR250PT | SR260PT | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Instantaneous Forward Voltage at 2.0 A DC | | $V_F$ | 0.55 | | | 0.70 | | Volts |
| Maximum Average Reverse Current | @ $T_A$ = 25°C | $I_R$ | 1.0 | | | | | mAmps |
| at Rated DC Blocking Voltage | @ $T_A$ = 100°C | | 10 | | | | | mAmps |

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance ( Junction to Ambient ) : Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

# RATING CHARACTERISTIC CURVES ( SR220PT THRU SR260PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

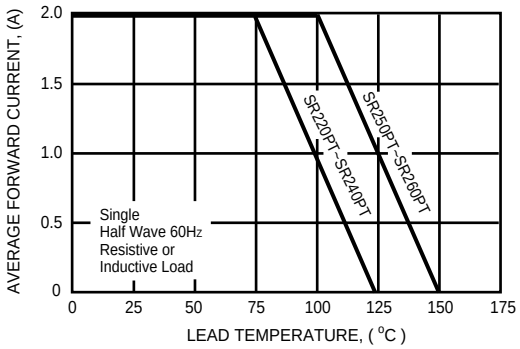



FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

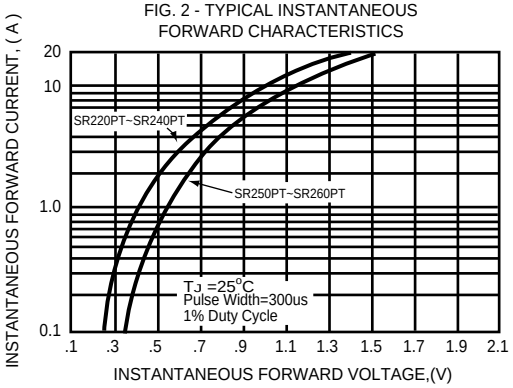



FIG. 3A - TYPICAL REVERSE CHARACTERISTICS

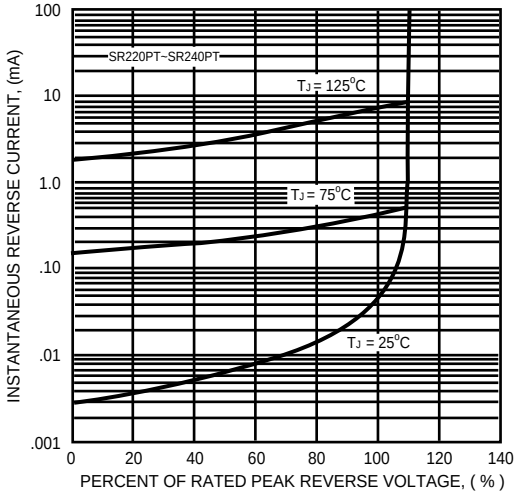



FIG. 3B - TYPICAL REVERSE CHARACTERISTICS

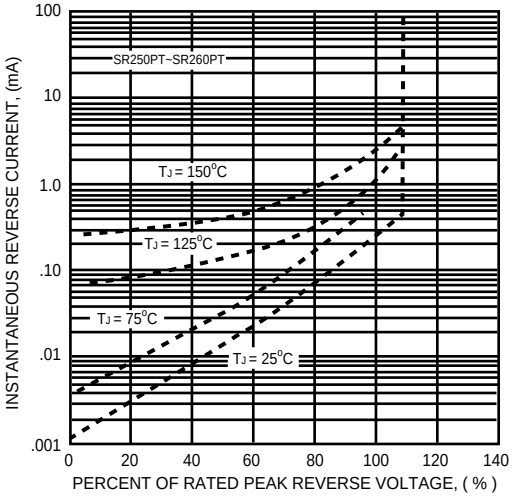



FIG. 4 - TYPICAL JUNCTION CAPACITANCE

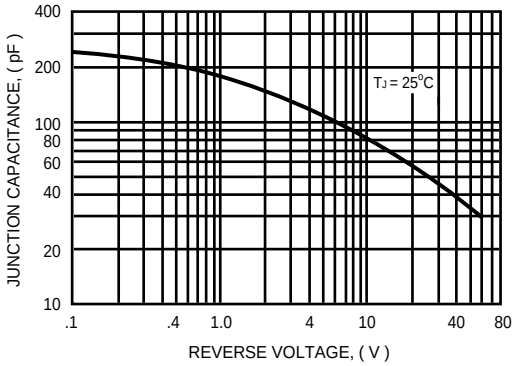



FIG. 5 - MAXIMUM NON-REPETIVE FORWARD SURGE CURRENT