



**CHENMKO ENTERPRISE CO.,LTD**

**AUTOMOTIVE RECTIFIER**

**VOLTAGE RANGE 50 - 1000 Volts    CURRENT 25 Amperes**

*Lead free devices*

**RA2505PT**

**THRU**

**RA2510PT**

#### FEATURES

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

#### MECHANICAL DATA

**Case:** JEDEC RA molded plastic

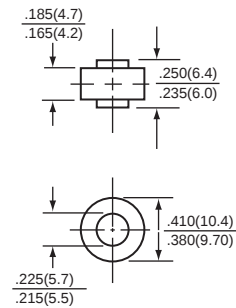
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any



**RA**



Dimensions in inches and (millimeters)

**RA**

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

| RATINGS                                                                                           | SYMBOL   | RA 2505PT   | RA 2510PT | RA 252PT | RA 254PT | RA 256PT | RA 258PT | RA 2510PT | UNITS  |
|---------------------------------------------------------------------------------------------------|----------|-------------|-----------|----------|----------|----------|----------|-----------|--------|
| Marking Color                                                                                     |          | Violet      | Brown     | Red      | Yellow   | Blue     | Silver   | Gold      |        |
| Maximum Recurrent Peak Reverse Voltage                                                            | VRRM     | 50          | 100       | 200      | 400      | 600      | 800      | 1000      | Volts  |
| Maximum RMS Voltage                                                                               | VRMS     | 35          | 70        | 140      | 280      | 420      | 560      | 700       | Volts  |
| Maximum DC Blocking Voltage                                                                       | VDC      | 50          | 100       | 200      | 400      | 600      | 800      | 1000      | Volts  |
| Maximum Average Forward Rectified Current at Tc = 150°C                                           | Io       | 25.0        |           |          |          |          |          |           | Amps   |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM     | 400         |           |          |          |          |          |           | Amps   |
| Typical Thermal Resistanc                                                                         | R θ JL   | 1.0         |           |          |          |          |          |           | °C / W |
| Operating and Storage Temperature Range                                                           | TJ, TSTG | -65 to +175 |           |          |          |          |          |           | °C     |

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

| CHARACTERISTICS                                                 |                          | SYMBOL         | R A 250 5PT | R A 251 PT | R A 25 2PT | R A 25 4PT | R A 25 6PT | R A 25 8PT | R A 2510PT | UNITS |
|-----------------------------------------------------------------|--------------------------|----------------|-------------|------------|------------|------------|------------|------------|------------|-------|
| Maximum Instantaneous Forward Voltage at 25.0 A DC              |                          | V <sub>F</sub> | 1.0         |            |            |            |            |            |            | Volts |
| Maximum Reverse Current at rated<br>DC blocking Voltage per leg | @ T <sub>A</sub> = 25°C  | I <sub>R</sub> | 25          |            |            |            |            |            |            | uAmps |
|                                                                 | @ T <sub>C</sub> = 100°C |                | 500         |            |            |            |            |            |            |       |

NOTES : Enough heat sink must be considered in application.

2001-6

**RATING CHARACTERISTIC CURVES ( RA2505PT THRU RA2510PT )**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

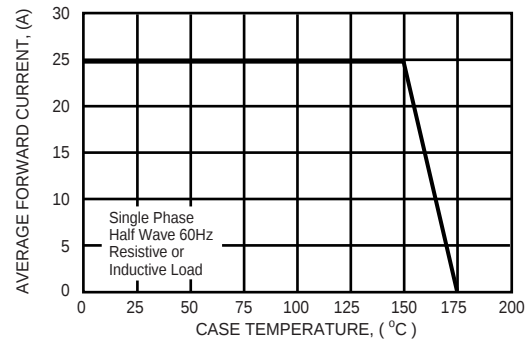


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

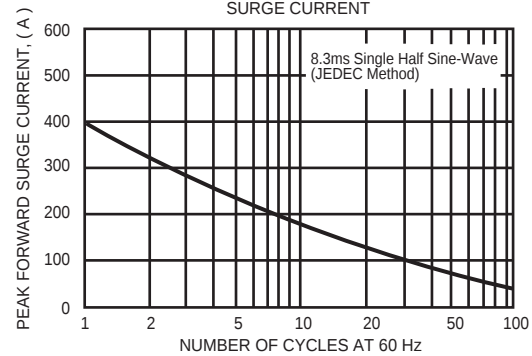


FIG. 3 - FORWARD POWER DISSIPATION

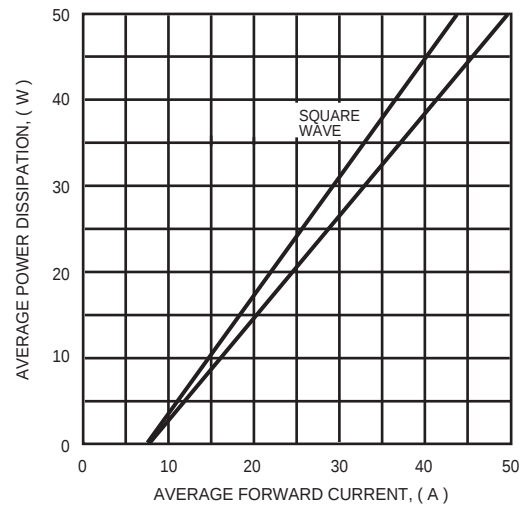


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

