



# CHENMKO ENTERPRISE CO.,LTD

## AUTOMOTIVE RECTIFIER

VOLTAGE RANGE 50 - 1000 Volts CURRENT 25 Amperes

**RA2505PT  
THRU  
RA2510PT**

Lead free devices

### FEATURES

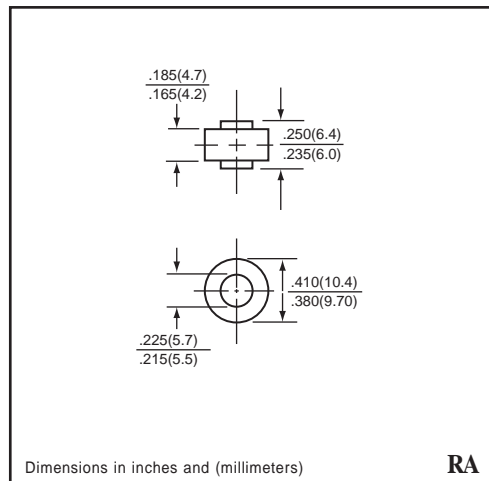
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability

### 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

### 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	RA 2505PT	RA 2510PT	RA 252PT	RA 254PT	RA 256PT	RA 258PT	RA 2510PT	UNITS
		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	RA 2505PT	RA 2510PT	RA 252PT	RA 254PT	RA 256PT	RA 258PT	RA 2510PT	UNITS
Maximum Instantaneous Forward Voltage at 25.0 A DC	VF	1.0							Volts
Maximum Reverse Current at rated DC blocking Voltage per leg	@ TA = 25°C	25							uAmps
	@ TC = 100°C	500							

NOTES : Enough heat sink must be considered in application.

## RATING CHARACTERISTIC CURVES ( RA2505PT THRU RA2510PT )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

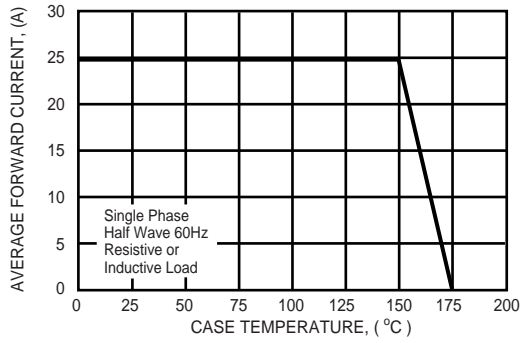


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

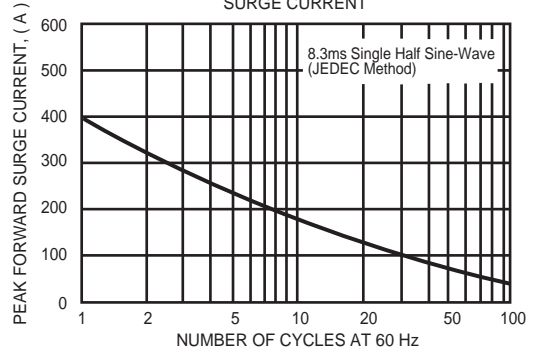


FIG. 3 - FORWARD POWER DISSIPATION

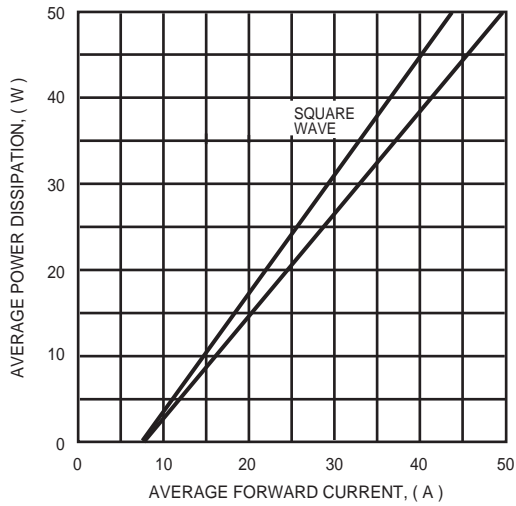


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

