



## APPLE - RP SOLID STATE RELAY



GENERAL	
Operating temperature	- 30 deg. C to 80 deg. C
Operating frequency	47 Hz to 63 Hz.
I / O Insulation	2 kV
I / O Isolation base	3 kV
Weight	@ 250 g
Dimensions ( L* B * H )	104 * 73.5 * 21
LED ON indication on request	

**SALIENT FEATURES:**

- 2 kV ISOLATION.
- **REVERSE PHASING - ELECTRICAL INTERLOCK.**
- LOW INPUT CURRENT.
- ZERO VOLTAGE & RANDOM TURN ON.
- "SNUBBERED" TRIAC OUTPUT.
- TRANSIENT IMMUNITY.
- FASTER SWITCHING RESPONSE.
- NO NOISE FEEDBACK FROM OUTPUT TO INPUT.
- NO NOISE DUE TO LOAD CURRENT SWITCHING AT NEAR ZERO POINT.
- A LONGER LIFETIME DUE TO CONTACTLESS SYSTEM.

**TECHNICAL DATA (@ TA = 25°C)**

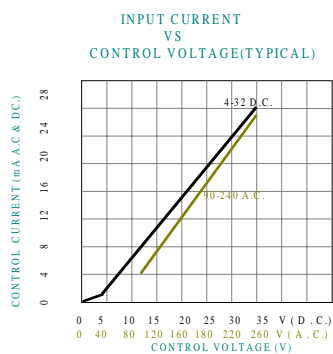
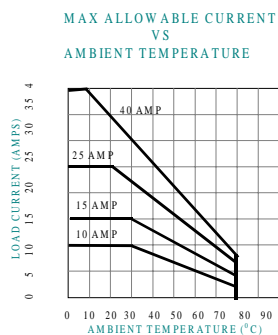
INPUT	4 - 32 V D.C.			24 V A.C.			90 - 240 V A.C.			
	MIN	MAX	UNIT	MIN	MAX	UNIT	MIN	MAX	UNIT	
INPUT ON VOLTAGE	4	32	V D.C.	19.2	28.8	V A.C.	90	240	V A.C.	
INPUT OFF VOLTAGE	1	1.5	V D.C.	11	12	V A.C.			V A.C.	
INPUT CURRENT	8	22	mA	8	22	mA	8	22	mA	
INPUT IMPEDANCE	0.22	1.4	K Ω			K Ω		16	K Ω	
OUTPUT			SYMBOL	ZERO SWITCHING				UNIT		
MAX NOMINAL RMS CURRENT			$I_T$	10	15	25	40	A		
LINE VOLTAGE				280	480	280	480	280	480	V A.C.
MINIMUM LINE VOLTAGE				24	24	24	24		V A.C.	
SYNCHRONIZING VOLTAGE				5 - 20	5 - 20	5 - 20	5 - 20		V PK	
MAX ON STATE VOLTAGE DROP			$V_{TM}$	1.6	1.6	1.85	1.85		$V_{RMS}$	
PEAK ONE CYCLE SURGE ON STATE			$I_{TSM}$	90	125	240	300		A	
LEAKAGE CURRENT			$I_{DRM}$	7 - 10	7 - 10	7 - 10	7 - 10		mA	
TURN OFF TIME(MAX FOR ZERO SWITCHING)			$T_{OFF}$	10	10	10	10		ms	
RATE OF RISE OF OFF STATE VOLTAGE			dV / dt	200	200	200	200		V/s	
HOLDING CURRENT			$I_{HO}$	75	75	75	75		mA	
FUSING CURRENT			$I_t$	72	110	312	450		A <sup>2</sup> s	
THERMAL RESISTANCE(JUNCTION - CASE)			$\Theta_{JC}$	3.4	2.3	1.5	1.2		<sup>0</sup> C/W	

**NOTE:**

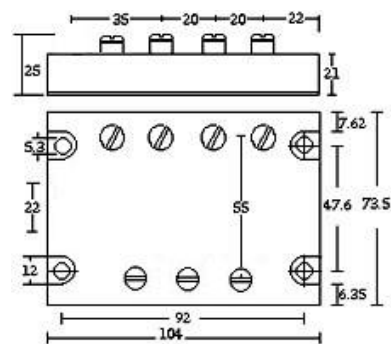
1. Ratings are based on single mounted unit in free air flow for closely packed units. Careful consideration of ambient temperature will be necessary on account of restricted airflow.
2. Use of metal oxide varistor for transient voltage protection, and semi conductor protection is recommended.
3. For load current above 3A, heat sink is to be used. To select heat sink, consult manufacturer.
4. Ensure correct input supply, relay operation may be erratic for inputs between 1-4VDC
5. For ordering information, please refer to the SOLID STATE RELAY SELECTION GUIDE

**Specifications subjected to change without notice.**

### INPUT OUTPUT CHARACTERISTIC:

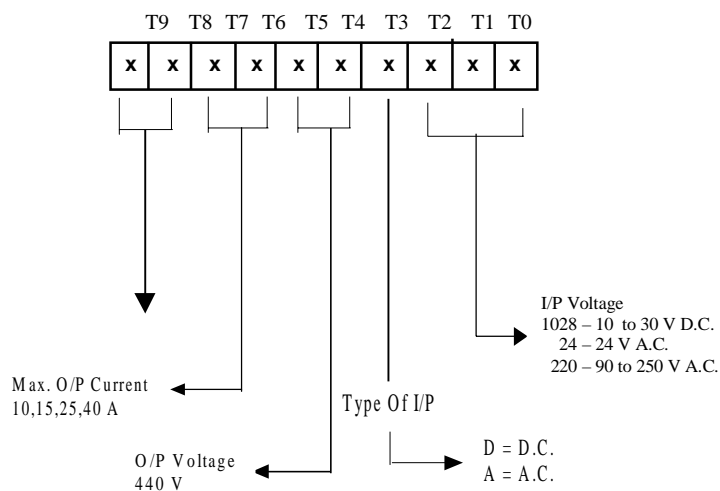


### DIMENSIONAL DIAGRAM:



All Dimensions are in mm

### SELECTION CRITERIA:



e.g. => **RP4044A220**

RP = Reverse Phasing  
40 = 40 A (Max O/P Current)  
44 = 440 V A.C. O/P  
A = A.C. I/P  
220 = V I/P