

40 Amp Power PCB Relay

PTRD-T



FEATURES

- Most Popular Power PCB Relay Footprint - T90
- 40 Amp 250 VAC General Purpose UL Rating
- 2 HP 250 VAC Rating
- UL Class F Insulation Standard
- Gold Flashed Contacts Available
- Meets UL 508 and UL 873 Spacing
- Epoxy Sealed, Immersion Cleanable
- RoHS Compliant

CONTACT DATA

Material	AgSnO ₂ , AgSnO ₂	
Initial Contact Resistance	50 MΩ Max. @ 1 A, 6 VDC	
Maximum Switching Voltage	110 VDC, 300 VAC	
Maximum Switching Current	40 A	
Maximum Switching Power	1,500 W, 12,000 VA	
Service Life	Mechanical	1 X 10 ⁷ Operations
	Electrical	5 X 10 ⁴ Operations

Meets UL 508 and UL 873 Spacing - 3.18 mm Through Air, 6.36 mm Over Surface.

CAL US E86876

Load Type	Voltage	1 Form A	1 Form B (SPDT-NC)	1 Form C	
				NO	NC
General Purpose	120 VAC	40 A	30 A	40 A	30 A
	250 VAC	40 A	30 A	40 A	30 A
	277 VAC	30 A	20 A	30 A	20 A
	30 VDC	40 A	30 A	40 A	30 A
Resistive	120 VAC	30 A	20 A	30 A	20 A
	250 VAC	30 A	20 A	30 A	20 A
Motor	240 VAC	2 HP	---	2 HP	---
	120 VAC	1 HP	---	1 HP	---
LRA/FLA	240 VAC	80 A/30 A	---	80 A/30	---
	120 VAC	96 A/30 A	---	96 A/30	---

CHARACTERISTIC

Operate Time	Less than 15 ms
Release Time	Less than 10 ms
Insulation Resistance	1,000 MΩ min, at 500 VDC, 50% RH
Dielectric Strength	50 Hz 2,500 V 1 Min Between Coil and Contacts
	4,000 V without Pin 6
	50 Hz 1,500 V 1 min. Between Contacts
Shock Resistance	200 m/s, 11 ms
Power Consumption	0.9 W, 0.6 W

CHARACTERISTIC Continued

Vibration Resistance	10 - 55 Hz Double Amplitude
Terminal Strength	10N
Solderability	235 °C for 3 secs
Operating Temperature Range	- 40°C to 125°C
Storage Temperature Range	- 40°C to 155°C
Relative Humidity	85% (at 40°C)
Weight	13.5 gr Approximately
Material Compliant To	EU RoHS V2, EU REACH V3

ORDERING INFORMATION

Example: PTRH -1C -12 S -T3 -X

Model: **PTRH (PTRH-T)**

Contact Form: **1A, 1B, 1C**

Coil Voltage: **3, 5, 6, 9, 12, 15, 24, 48, 110**

Enclosure: **S**: Sealed; **E**: Covered **C**: Dust Cover

Coil Sensitivity: **Nil**: 0.9 W; **0.6**: 0.6 W;

Contact Material: **Nil**: AgCdO; **T**: AgSnO₂

Mounting Type: **T2**: Form 1A PCB & QC; **T3**: Form 1C PCB & QC;
T4: 1A Panel all QC; **T5**: 1C Panel all QC

RoHS Compliant: **-X**

Box Quantity: 600; Inner Box 300

COIL DATA

Coil Voltage		Coil Power (W)			Coil Power (W)		Must Release
		Resistance (Ohms ± 10%)			Must Operate Voltage Max (VDC)		Voltage Min (VDC)
Rated	Max	0.6 W	0.9 W	1.1 W	0.6 W & 0.9 W	1.1 W	
3	3.9	15	10	——	2.25	——	0.3
5	6.5	42	28	——	3.75	——	0.5
6	7.8	60	40	33	4.50	4.8	0.6
9	11.7	135	90	——	6.75	——	0.9
12	15.6	240	150	131	9.00	9.6	1.2
15	19.5	375	260	——	10.25	——	1.5
18	23.4	540	380	——	13.50	——	1.8
24	31.2	960	640	524	18.00	19.2	2.4
28	36.4	1307	871	713	21.0	22.4	2.8
48	62.4	3840	2560	2095	36.00	38.4	4.8
110	143	20167	13445	——	82.50	——	11.0

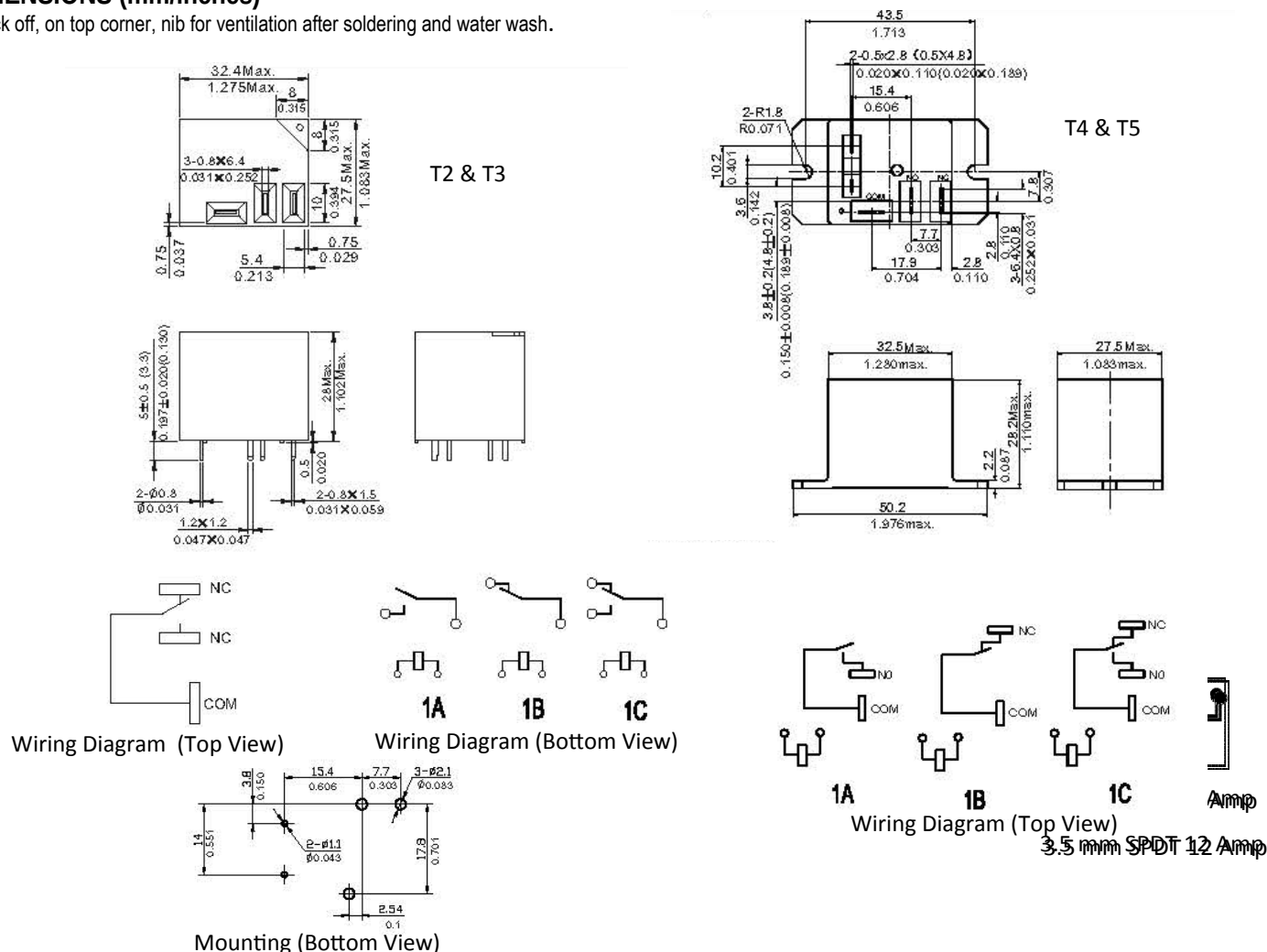
NOTES:

The use of any coil voltage less than the rated voltage will compromise the operation of the relays. Must Operate Voltage is listed for test purposes only and is not to be used as design criteria. Pickup and release voltages are for test purposes only and are not to be used as design criteria.

Dimensions are in mm, Inches are listed for reference only.

DIMENSIONS (mm/inches)

Knock off, on top corner, nib for ventilation after soldering and water wash.



3220 Commander Drive, Suite 102 Carrollton, TX 75006

Sales: (972) 713-6272

(888) 997-3933

Fax: (972) 735-0964

www.PickerComponents.com

e-mail: sales@pickercomponents.com