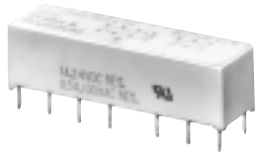


T84 series

4 Pole, High Dielectric PC Board Relay

File E29244

File LR35579

Features

- Meets FCC Part 68 isolation.
- 4 Form C contact arrangement.
- Standard 0.1" x 0.3" grid spacing in a DIP configuration.
- Standard or sensitive DC coils through 48 volts.
- Well suited for audio communications circuits, logic and process control, vending machines and office automation applications.
- Immersion cleanable, plastic sealed case.

Contact Data

Arrangements: Bifurcated cross bar in 4 Form C (4PDT).
Material: Silver-palladium alloy (stationary contacts have gold overlay).
Ratings: Max. Switching Voltage: 120V, AC or DC.
Max. Switching Power (resistive load): 24W DC, 60VA AC.
Max. Switching Current: 1A, DC or AC.
Min. Switching Current: .01mA, 10mVDC.
Max. Carrying Current: 2A, DC or AC.
Expected Mechanical Life: 20 million operations.
Expected Electrical Life: 500,000 ops. @ 1A, 24VDC, resistive.
200,000 ops. @ 0.5A, 120VAC, resistive.
Initial Contact Resistance: 100 milliohms, max., @ 100mA, 6VDC.

Initial Dielectric Strength

Between Open Contacts: 1,000V rms, 60 Hz.
1,500V FCC Part 68 surge test.
Between Contact Sets: 1,500V rms, 60 Hz.
1,500V FCC Part 68 surge test.
Contact to Coil: 1,500V rms, 60 Hz.; 1,500V FCC Part 68 surge test.

Initial Insulation Resistance

Between Mutually Insulated Conductors : 10^9 ohms @ 500VDC (except between dual coils).

Coil Data @ 20°C

Voltage: 3 through 48VDC.
Maximum Continuous Coil Power: 800 milliwatts.
Temperature Rise: 77°C per watt, typ.

Coil Data @ 20°C

	Resistance in Ohms ± 10%					
	Standard Coils			Sensitive Coils		
	Single Coil Non-Latching	Single Coil Latching	Dual Coil Latching (either coil)	Single Coil Non-Latching	Single Coil Latching	Dual Coil Latching (either coil)
Nom. Coil Power → Voltage ↓	400mW	N/A	360mW	200mW	90mW	180mW
3	22.5	N/A	25	45	100	50
5	62.5	N/A	69	125	278	139
6	90	N/A	100	180	400	200
12	360	N/A	400	720	1,600	800
24	1,440	N/A	1,600	2,880	6,400	3,200
48	5,760	N/A	6,400	11,520	25,600	12,800

Operate Data @ 20°C

Must Operate Voltage: 70% of nominal voltage or less.
Must Release Voltage (non-latching): 10% of nominal voltage or more.
(Latching): Must operate voltage applied to reset coil (dual) or negative voltage (single).
Operate Time (Excluding Bounce)†: 6 ms, max.
Release Time (Excluding Bounce)†: 4 ms, max.
Reset Time (Latching)†: 6 ms, max.
Bounce Time†: 1 ms, approximately.
† At or from Nominal Coil Voltage

Environmental Data

Temperature Range: **Standard Coil:** -40°C to +70°C.
Sensitive Coil: -40°C to +80°C.
Vibration: Operational and Non-destructive: 30g from 10-500 Hz.
Shock: Operational: 50g at 11 ms 1/2 sinusoidal impulse.
Non-destructive: 100g at 11 ms 1/2 sinusoidal impulse.

Mechanical Data

Termination: Printed circuit terminals on 0.1" (2.54mm) centers.
Enclosure: Sealed PBT plastic case.
Weight: 0.25 oz. (7g) approximately.

Ordering Information

Typical Part Number ►	T84	S	17	D	2	1	4	-24

1. Basic Series:
T84 = High dielectric, PC board relay.

2. Construction:
S = Sealed.

3. Contact Arrangement:
17 = 4 Form C (4PDT)

4. Coil Input:
D = DC Voltage.

5. Coil Sensitivity:
2 = Sensitive.
4 = Standard (not available on single coil latch).

6. Functional Type:
1 = Single coil non-latching. 3 = Dual coil latching.
2 = Single coil latching.

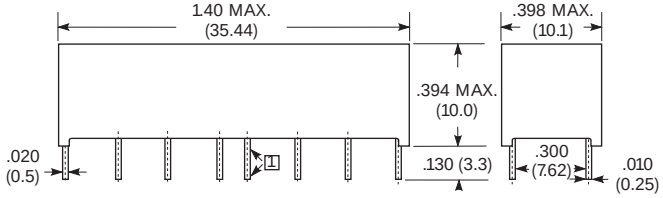
7. Contact Material:
4 = Silver-palladium alloy.

8. Coil Voltage:
03 = 3VDC 05 = 5VDC 06 = 6VDC 12 = 12VDC 24 = 24VDC
48 = 48VDC

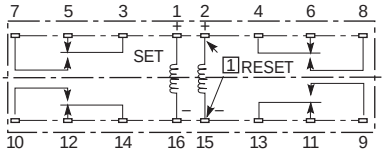
Stock Items – The following items are maintained in stock.

T84S17D214-05 T84S17D214-48 T84S17D414-12 T84S17D434-05
T84S17D214-12 T84S17D234-05 T84S17D414-24 T84S17D434-12
T84S17D214-24 T84S17D414-05 T84S17D414-48

Outline Dimensions

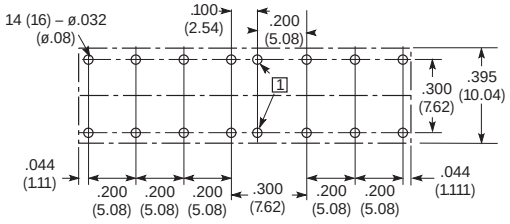


Wiring Diagram (Bottom View)



1 – Second set of coil terminals is for the dual coil latching version.
2 – Schematic shows de-energized position for non-latching version; "reset" position for latching version.
3 – Coil polarity shown must be observed for non-latching versions.
4 – For single coil latching, polarity shown results in "set." Reverse polarity results in "reset."

PC Board Layout (Bottom View)



Tyco Electronics
700 Westpark Drive
Peachtree City, GA 30269-1498