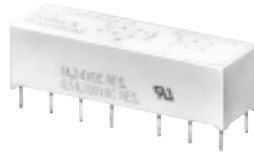


# T84 series

## 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<sup>9</sup> 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.

### Ordering Information

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

- Basic Series:**  
T84 = High dielectric, PC board relay.
- Construction:**  
S = Sealed.
- Contact Arrangement:**  
17 = 4 Form C (4PDT)
- Coil Input:**  
D = DC Voltage.
- Coil Sensitivity:**  
2 = Sensitive.  
4 = Standard (not available on single coil latch).
- Functional Type:**  
1 = Single coil non-latching.      3 = Dual coil latching.  
2 = Single coil latching.
- Contact Material:**  
4 = Silver-palladium alloy.
- 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

Tyco Electronics Corporation - P&B, Winston-Salem, NC 27102  
 Technical Support Center: 1-800-522-6752, www.pandbrelays.com

### 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)
<b>Nom. Coil Power → Voltage ↓</b>	400mW	N/A	360mW	200mW	90mW	180mW
<b>3</b>	22.5	N/A	25	45	100	50
<b>5</b>	62.5	N/A	69	125	278	139
<b>6</b>	90	N/A	100	180	400	200
<b>12</b>	360	N/A	400	720	1,600	800
<b>24</b>	1,440	N/A	1,600	2,880	6,400	3,200
<b>48</b>	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)t:** 6 ms, max.  
**Release Time (Excluding Bounce)t:** 4 ms, max.  
**Reset Time (Latching)t:** 6 ms, max.  
**Bounce Time)t:** 1 ms, approximately.

t At or from Nominal Coil Voltage

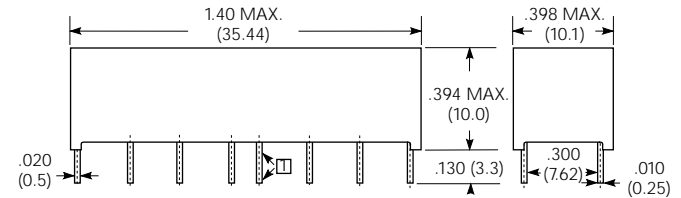
### Environmental Data

**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.

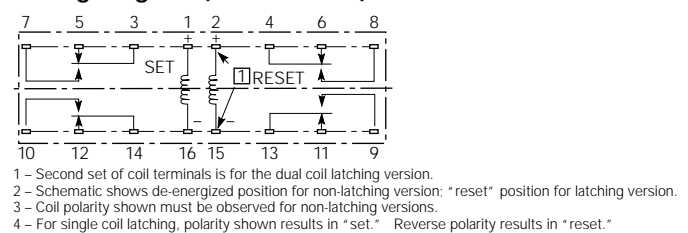
### Mechanical Data

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

### Outline Dimensions



### Wiring Diagram (Bottom View)



### PC Board Layout (Bottom View)

