

T7C series

12 AMP MINIATURE POWER PCB RELAY

File E29244

File LR48471M83

7

RELAYS

FEATURES

- 12 amp switching capacity.
- 1 Form C contact arrangements.
- Ideal for domestic appliances and office machines.
- Resists high temperature and various chemical solutions.

CONTACT DATA @ 20 C

Arrangements: 1 Form C (SPDT).

Max. Switching Rate: 300 ops./min. (no load).
30 ops./min. (rated load)

Expected Mechanical Life: 10 million operations.

Expected Electrical Life: 100,000 operations.

Contact Resistance: 100 milliohms max.

Material: Silver-cadmium Oxide.

CONTACT RATINGS†

Load	Form C (N.O.)*	Form C (N.C.)*	Form C (N.O.,N.C)
Resistive (Cosθ = 1)	10A, 250VAC, 28VDC	5A, 240VAC, 28VDC	4A, 120VAC, 24VDC
	12A, 120VAC	8A, 120VAC	
Inductive (Cosθ = 0.4, L/R = 7ms)			

*N.O. and N.C. loaded simultaneously.

†Tape must be removed from sealed models after cleaning to achieve these ratings.

INITIAL DIELECTRIC STRENGTH

Between Open Contacts: 750VAC (1 minute).

Between Coil and Contacts: 1,500VAC (1 minute).

COIL DATA @ 20 C

Voltage: 3 to 48VDC.

Nominal Power: 360 milliwatts

510 milliwatts for 48VDC coil.

ORDERING INFORMATION

Typical Part Number	T7C	V	5	D	-24
1. BASIC SERIES:	T7C = Miniature power relay.				
2. ENCLOSURE:	V = Vented (Flux-tight)* S = Immersion cleanable, tape sealed case				
3. CONTACT ARRANGEMENT:	5 = 1 Form C (SPDT)				
4. COIL INPUT:	D = DC Voltage				
5. COIL VOLTAGE:	03 = 3VDC	06 = 6VDC	09 = 09VDC		
	12 = 12VDC	24 = 24VDC	48 = 48VDC		

* Not suitable for immersion cleaning processes.

STOCK ITEMS - The following items are maintained in stock.

- T7CS5D-06
- T7CS5D-12
- T7CS5D-24

Coil Temperature Rise: 35°C max, at rated coil voltage.

Duty Cycle: Continuous.

COIL DATA @ 20°C

Rated Coil Voltage (VDC)	Coil Resistance (Ohms) +10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
3	25	2.25	0.15
6	100	4.50	0.30
9	225	6.75	0.45
12	400	9.00	0.60
24	1,600	18.00	1.20
48	4,500	36.00	2.40

OPERATE DATA @ 20 C

Operate Time: 15 ms, max.

Release Time: 5 ms, max.

ENVIRONMENTAL DATA

Temperature Range: -30°C to +55°C.

Insulation Resistance: 100 milliohms (500VDC).

Vibration, Mechanical: 10 to 55 Hz., 1.5mm double amplitude

Operational: 10 to 55 Hz., 1.5mm double amplitude.

Shock, Mechanical: 100g min.

Operational: 10g min.

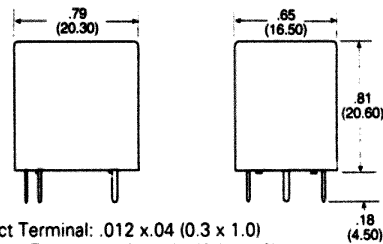
Operating Humidity: 45 to 85% RH.

MECHANICAL DATA

Termination: Printed circuit terminals.

Weight: 0.42 oz. (12 g).

OUTLINE DIMENSIONS



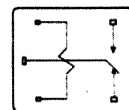
Movable Contact Terminal: .012 x .04 (0.3 x 1.0)

Stationary Contact Terminals: .02 x .04 (0.5 x 1.0)

Coil Terminals: .0177 x .02 (0.45 x 0.5)

WIRING DIAGRAM (Bottom View)

1 Form C



SUGGESTED PC BOARD LAYOUT (Bottom View)

