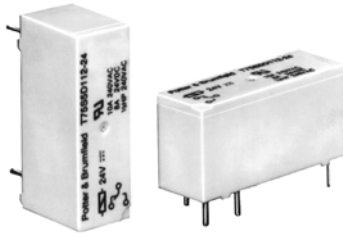


Sensitive, Low Profile, Hi-Current Relay Designed to Meet International Standards



Features

- High sensitivity – nominal coil power requirement is as low as 212mW.
- Low profile, .591 in. (15mm) tall case uses only .465 in² (3cm²) of area on the printed circuit board, permitting high density circuit design.
- Power switching capability – contacts rated 10 amps in 1 Form A (SPST-NO) or 1 Form C (SPDT) arrangements.
- Designed to meet UL, CSA, VDE, SEMKO and SEV requirements.
- Designed to meet VDE 8mm spacing, 4kV dielectric, coil to contacts.
- Designed to meet 3 mm creepage between contacts.
- Conforms to:
 - VDE 0110 – Insulation Group C (250V)
 - VDE 435 Part 201 – High current applications
 - VDE 0804 – Telecommunications equipment
 - VDE 0631 – Temperature controllers and limiters
 - VDE 0700 – Household appliances
 - VDE 0805/5.90 – Office machines
- Wash tight (washable).
- Well suited for a broad range of applications e.g. HVAC, appliances, security and industrial control.

Contact Ratings @ 25°C with relay properly vented. Remove vent nib after soldering and cleaning.

Arrangements: 1 Form A (SPST-NO) and 1 Form C (SPDT).

Material: Silver-cadmium oxide.

Expected Mechanical Life: 10 million operations.

Expected Electrical Life:

- 100,000 operations at 8 amps, 240VAC.
- 50,000 operations at 14 amps NO / 5 amps NC, 120VAC Res.
- 30,000 operations at 7.2 FLA, 45 LRA, 120VAC.
- 10,000 operations at 5 FLA, 30 LRA, 240VAC.
- 30,000 operations at B300 pilot duty (360VA, 240VAC; 470VA, 120VAC).

Contact Ratings (See Figure 1):

Maximum Switched Voltage: 380VAC.

Maximum Switched Current: 14/5 (N.O./N.C.) amps, AC resistive;
8 amps DC (see Fig. 1)

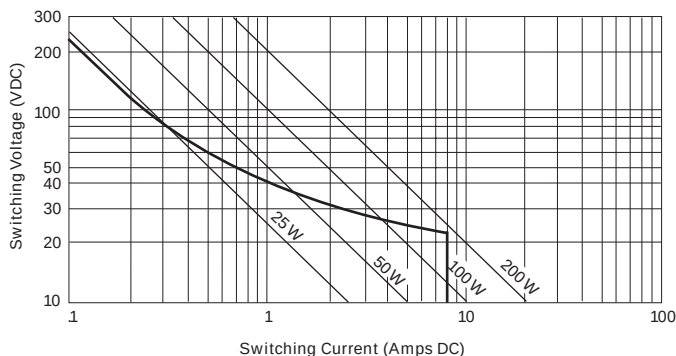
Maximum Switched Power: 200W, DC; 2,000VA, AC.

Minimum Required Contact Load: 12V, 100mA.

VDE Contact Ratings: 8 amps, 250VAC.

UL Contact Ratings: 10 amps, 240VAC; 8 amps 24VDC;
1/3 HP, 120VAC; 1/2 HP, 240VAC.

Figure 1 - DC Switching Load Limit Curve



T75 series

10 Amp, PC Board Miniature Relay

UL File E29244

VDE File No. 3919

RoHS
Ready

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/ laboratories and review them to ensure the product meets the requirements for a given application.

Initial Dielectric Strength

Between Open Contacts: 1,000V rms.

Between Contacts and Coil: 4,000V rms, 8mm.

Coil Data

Voltage: 3 to 60VDC.

Maximum Power @ 23°C: 1W.

Nominal Power @ 23°C: 230mW, typ.

Temperature Rise: 85°C° per Watt.

Duty Cycle: Continuous.

Coil Data

	Nominal Voltage	DC Resistance in Ohms ±10%	Must Operate Voltage	Nominal Coil Current (mA)
DC Coils	3	40	2.1	75.0
	5	118	3.4	42.4
	6	165	4.1	36.4
	9	365	6.1	24.7
	12	650	8.2	18.5
	18	1,455	12.3	12.4
	24	2,270	16.3	10.6
	36	5,460	24.5	6.4
	48	8,790	32.6	5.5
	60	15,265	40.8	3.9

Operate Data @ 23°C

Must Operate Voltage: 70% of nom. voltage or less.

Must Release Voltage: 10% of nom. voltage or more.

Operate Time (Excluding Bounce): 6 ms, typ., at nom. voltage.

Release Time (Excluding Bounce): 2.5 ms, typ., at nom. voltage.

Maximum Switching Rate: 20 operations/second.

Maximum Continuous Operating Voltage: 225% of nom. voltage.

Temperature Range

Storage: -40°C to +130°C.

Operating: -40°C to +85°C.

Mechanical Data

Termination: Printed circuit terminals.

Enclosures: Wash tight (washable) case.

Weight: 0.39 oz. (11.0g) approximately.

Ordering Information

Typical Part Number ►

T75

S

5

D

1

1

2

-12

1. Basic Series:

T75 = Low profile, printed circuit board relay.

2. Enclosure:

S = Wash tight (washable).

3. Contact Arrangement:

1 = 1 Form A (SPST-NO)

5 = 1 Form C (SPDT)

4. Coil Input:

D = DC voltage

5. Coil Configuration:

1 = Single coil, non-latching (monostable)

6. Mounting and Terminals:

1 = Printed circuit terminals

7. Contact Material:

2 = Silver-cadmium oxide (AgCdO)

8. Coil Voltage:

03 = 3VDC

06 = 6VDC

12 = 12VDC

24 = 24VDC

48 = 48VDC

05 = 5VDC

09 = 9VDC

18 = 18VDC

36 = 36VDC

60 = 60VDC

NOTE: All part numbers are RoHS compliant.

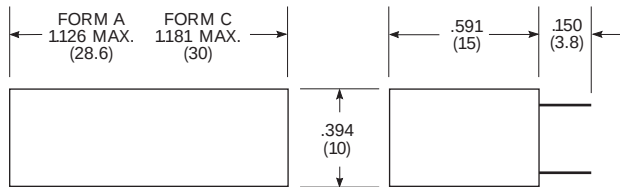
Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.

T75S5D112-05

T75S5D112-12

T75S5D112-24

Outline Dimensions



CONTACT TERMINALS: .023 x .040 (.58 x 1.02) REF.
COIL TERMINALS: .024 (.61) DIA. REF.

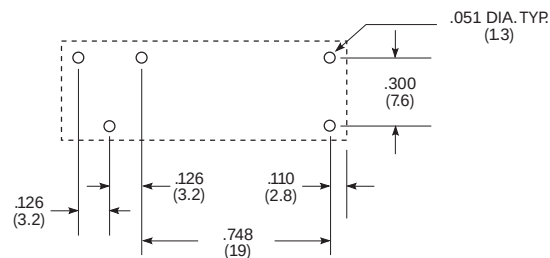
Wiring Diagram (Bottom View)



* ON SINGLE THROW MODELS,
ONLY NECESSARY TERMINALS
ARE PRESENT.

PC Board Layouts (Bottom Views)

1 Form C



1 Form A

