



PCJ series

Slim 5 Amp Miniature Power PC Board Relay

Air Conditioners, Refrigerators, Microwave Ovens

UL File No. E82292

CSA File No. 1031444

VDE File No. 122301

Features

- Slim outline, L20.4 x W7 x H15 (mm).
- 1 Form A (SPST-NO) contact arrangement.
- High dielectric capacity of 4kV.
- UL, CSA, VDE approvals.
- Immersion cleanable, sealed version available.
- Cadmium-free contacts.

Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO).

Material: Ag Alloy.

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

Expected Mechanical Life: 5 million ops (no load).

Expected Electrical Life: 10,000 ops (rated load).

Minimum Load: 100mA @ 5VDC.

Initial Contact Resistance: 100Mohms @ 1A, 6VDC.

Coil Data @ 20°C

PCJ				
Rated Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (ohms) ± 10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
3	66.7	45	2.25	0.15
5	40.0	125	3.75	0.25
6	33.3	180	4.50	0.30
9	22.5	405	6.75	0.45
12	16.7	720	9.00	0.60
18	11.1	1,620	13.50	0.90
24	8.6	2,880	18.00	1.20

Contact Ratings

Ratings: 5A @ 250VAC resistive.

Max. Switched Voltage: AC: 275V.

DC: 30V.

Max. Switched Current: 5A.

Max. Switched Power: 1,250VA, 150W.

Initial Dielectric Strength

Between Open Contacts: 750VAC, 50/60 Hz. (1 min.).

Between Contacts and Coil: 4,000VAC, 50/60 Hz. (1 min.).

Surge Voltage Between Coil and Contacts: 7,000V (1.2/50µs).

Initial Insulation Resistance

Between Mutually Insulated Conductors: 1,000Mohm @ 500VDCM.

Coil Data

Voltage: 3 to 24VDC.

Duty Cycle: Continuous.

Nominal Power: 200mW.

Max. Coil Power: 130% of nominal.

Operate Data @ 20°C

Must Operate Voltage: 75% of nominal voltage or less.

Must Release Voltage: 5% of nominal voltage or more.

Operate Time: 10ms max.

Release Time: 4ms max.

Environmental Data

Temperature Range:

Operating: -30°C to + 70°C.

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

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

Shock, Mechanical: 1,000m/s² (100G approximately).

Operational: 100m/s² (10G approximately).

Operating Humidity: 20 to 85% RH. (Non-condensing).

Mechanical Data

Termination: Printed circuit terminals.

Weight: 0.14 oz. (4g) approximately.

Ordering Information

Typical Part Number ▶

PCJ

-1

05

D

3

M

H

1. Basic Series:

PCJ = Miniature 1 Form A relay

2. Termination:

1 = 1 pole

3. Coil Voltage:

03 = 3VDC 06 = 6VDC 12 = 12VDC
05 = 5VDC 09 = 9VDC 24 = 24VDC

4. Coil Input:

D = Standard 200mW

5. Contact Material:

3 = AgNi

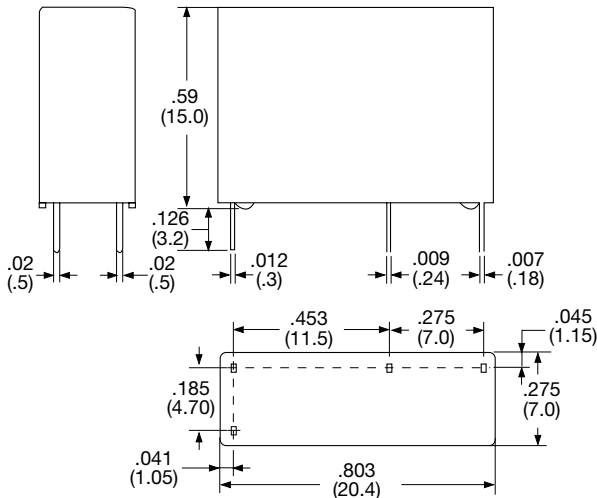
6. Contact Arrangement:

M = 1 Form A (NO)

7. Enclosure:

Blank = Vented (Flux-tight) cover H = Sealed plastic case

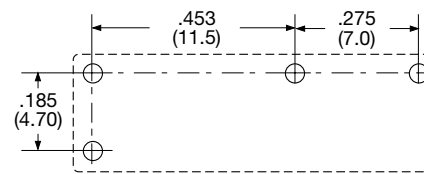
Outline Dimensions



Wiring Diagram (Bottom View)

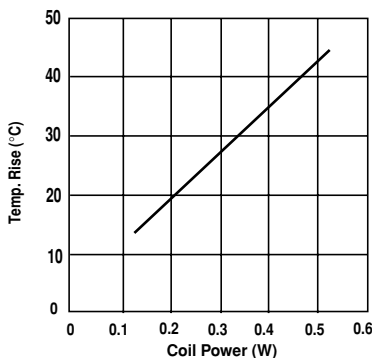


PC Board Layout (Bottom View)

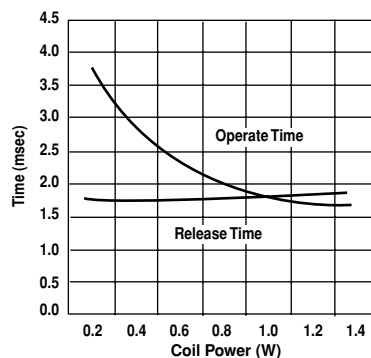


Reference Data

Coil Temperature Rise



Operate Time



Life Expectancy

