PCI series

Slim 2 Form A
Miniature PC Board Relay

Appliances, Audio Equipment, Office Machines

UL File No. E82292
CSA File No. LR48471

Features

- Slim and simple architecture.
- 2 Form A (DPST-NO) contact arrangement.
- Cadmium-free contacts.
- UL, CSA, approvals.
- Immersion cleanable, sealed version available.
- Magnetic blow-out available for DC loads.

Contact Data @ 20°C

Arrangements: 2 Form A (DPST-NO).
Material: Ag-GS Alloy.
Max. Switching Rate: 300ops./ min. (no load).
30ops./ min. (rated load).
Expected Mechanical Life: 1 million ops (no load).
Expected Electrical Life: 100,000 ops (rated load).
Minimum Load: 1mA @ 1VDC.
Initial Contact Resistance: 50 milliohms @ 1mA, 6VDC.

Contact Ratings

Ratings: 3A @ 24VDC resistive.
3A @ 120VAC resistive.
Max. Switched Voltage: **AC:** 240V.
DC: 50V.
Max. Switched Current: 5A.
Max. Switched Power: 300VA, 90W.

Initial Dielectric Strength

Between Open Contacts: 1,000VAC, 50/60 Hz. (1 min.).
Between Adjacent Contacts: 2,000VAC, 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: 350mW.
Max. Coil Power: 130% of nominal at 20°C.

Coil Data @ 20°C

PCI				
Rated Coil Voltage (VDC)	**Nominal Current (mA)**	**Coil Resistance (ohms) ± 10%**	**Must Operate Voltage (VDC)**	**Must Release Voltage (VDC)**
3	115.4	26	2.10	0.30
5	69.4	72	3.50	0.50
6	58.8	102	4.20	0.60
9	39.1	230	6.30	0.90
12	29.1	413	8.40	1.20
24	14.5	1,650	16.80	2.40

Operate Data @ 20°C

Must Operate Voltage: 70% of nominal voltage or less.
Must Release Voltage: 10% of nominal voltage or more.
Operate Time : 15ms max.
Release Time : 5ms 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.
Enclosure: Plastic sealed case with enclosure option "H".
Otherwise, vented (flux-tight) cover.
Weight: 0.41 oz (10.5g) approximately.

Ordering Information

Typical Part Number ▶	PCI	-2	05	D	M

1. Basic Series:
PCI = Miniature relay

2. Termination:
2 = 2 pole

3. Coil Voltage:
03 = 3VDC 06 = 6VDC 12 = 12VDC
05 = 5VDC 09 = 9VDC 24 = 24VDC

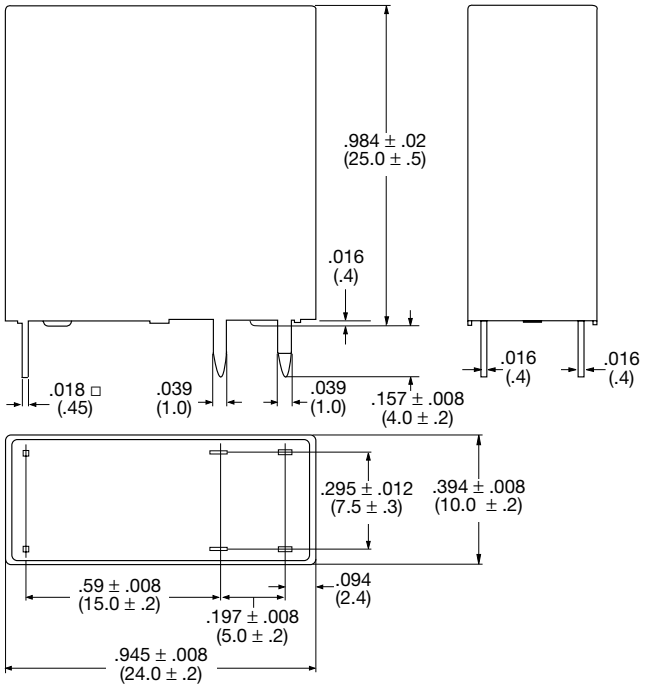
4. Coil Input:
D = Standard

5. Contact Arrangement:
M = 2 Form A

6. Enclosure:
Blank = Vented (Flux-tight) cover H = Sealed plastic case

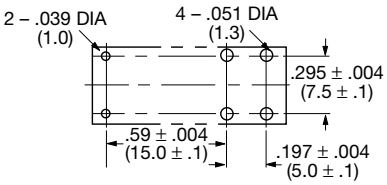
7. Optional:
Blank = Standard M = with magnetic blow-out

Outline Dimensions



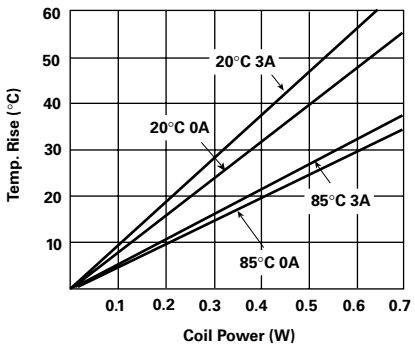
Wiring Diagram (Bottom View)

PC Board Layout (Bottom View)

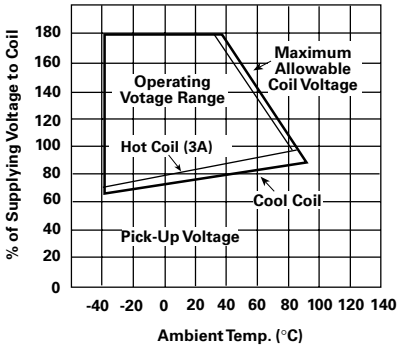


Reference Data

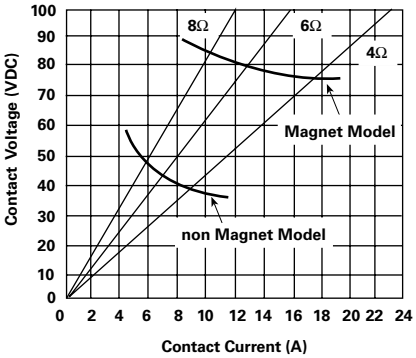
Coil Temperature Rise



Operating Voltage



DC Cut Ability for Audio Speaker Loads



Note: This data is based on the max. allowable temperature for E type insulation coil (115°C).