



# PCI series

## Slim 2 Form A Miniature PC Board Relay

Appliances, Audio Equipment, Office Machines

UL File No. E82292

CSA File No. LR48471

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.

### 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:** 5 to 48VDC.

**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)
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/s<sup>2</sup> (100G approximately).

**Operational:** 100m/s<sup>2</sup> (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.

Typical Part Number ►

**PCI -2 05 D M ,000**

**1. Basic Series:**  
PCI = Miniature relay

**2. Termination:**  
2 = 2 pole

**3. Coil Voltage:**  
05 = 5VDC    09 = 9VDC    24 = 24VDC  
06 = 6VDC    12 = 12VDC    48 = 48VDC

**4. Coil Input:**  
D = Standard

**5. Contact Arrangement:**  
M = 2 Form A

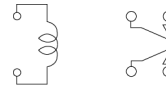
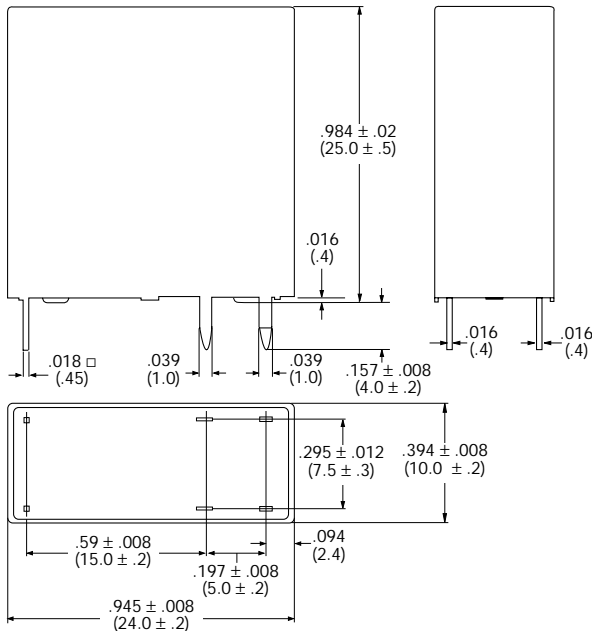
**6. Enclosure:**  
Blank = Vented (Flux-tight) cover    H = Sealed plastic case

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

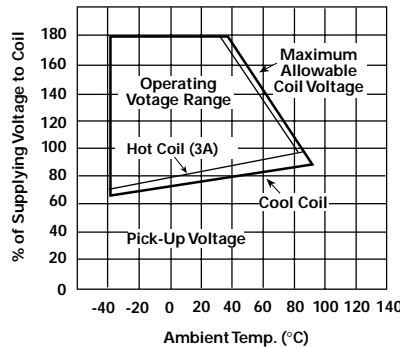
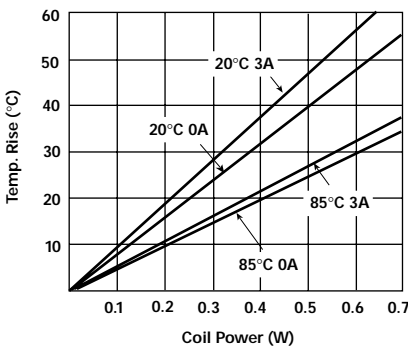
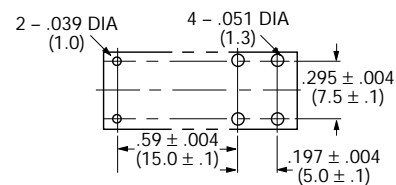
**8. Suffix:**  
,000 = Standard model    Other Suffix = Custom model

**Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.**  
None at present.

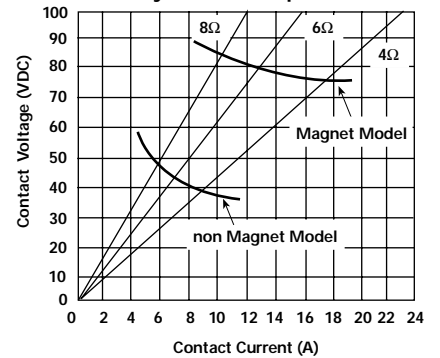
**Wiring Diagram (Bottom View)**



**PC Board Layout (Bottom View)**



**DC Cut Ability for Audio Speaker Loads**



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

Dimensions are shown for reference purposes only.

Dimensions are in inches over (millimeters) unless otherwise specified.

Specifications and availability subject to change.

www.tycoelectronics.com  
Technical support:  
Refer to inside back cover.