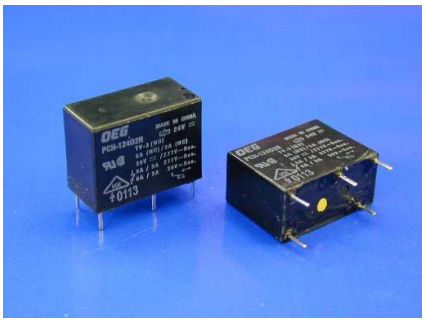


PCH series

5Amp Compact And High Capacity

PC Board Mount, Cd-free, Pb-free, RoHS Compliant

Air Conditioners, Refrigerators, Microwave Ovens

	File No.	E82292
	File No.	LR48471(400mW standard type)
	Reg.-Nr.	119568
	File No.	08001023449

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

- Rated Current : 5A
- Dielectric Strength : row coil power : 200mW

Contact Data @ 23℃

Contact Arrangements: 1a (1FormA), 1c (1FormC)
Contact Material: $AgSnO_2$
Max. Switching Rate: 300 ops./min. (no load)
20 ops./min. (rated load)
Expected Mechanical Life: 10,000,000 ops. (no load)
Expected Electrical Life: 100,000 ops. (rated load)
Min. Contact Load : 100mA,5VDC (reference data)
Initial Contact Resistance : 100miliohms @ 1A ,6VDC

Contact Ratings

Ratings :

1a,400mW	5A 277VAC (resistive load)
	5A 30VDC (resistive load)
	10A 125VDC (resistive load)
	TV-3 (NO contact)
1c,400mW	5A(NO contact),3A(NC contact) 277VAC(resistive load)
	5A(NO contact),3A(NC contact) 30VDC(resistive load)
	TV-3 (NO contact)
1a,200mW	5A 277VAC (resistive load)
	5A 30VDC (resistive load)
	10A 125VAC (resistive load)

Max. Switching Voltage : 277VAC,30VDC
Max. Switching Current : 10A(NO contact),3A(NC contact)
Max. Switching Power : 1,385VA(AC), 150W(DC)(NO contact)
831VA(AC), 90W(DC)(NC contact)

Initial Dielectric Strength

Between Open Contacts : 750VAC 50/60Hz (1min.)
Between Coil and Contacts : 4,000VAC 50/60Hz(1min.)
Surge Voltage Between Coil and Contacts : 8,000V(1.2/50μs)

Initial Contact Resistance

Between Mutually Insulated Conductors : 1,000 milliohms @ 500VDC

Coil Data @ 23℃

Rated Voltage : 5-48*VDC (＊Not prepared 48Vdc / 200mW type)
Rated Power : 400mW(standard type),
200mW(High Sensitive Type)
Limiting Voltage: 130% of nominal.

Coil Data @23℃

400mW(Standard type)				
Rated Coil Voltage (VDC)	Rated Current (mA)	Coil Resistance (ohms)±10%	Operate Voltage (VDC)	Release Voltage (VDC)
5	80.0	62.5	3.75	0.25
6	66.7	90.0	4.50	0.30
9	44.4	202.5	6.75	0.45
12	33.3	360	9.0	0.6
18	22.2	810	13.5	0.9
24	11.1	1440	18.0	1.2
48	5.6	5760	36.0	2.4

Coil Data @23℃

200mW(High Sensitive Type)*				
Rated Coil Voltage (VDC)	Rated Current (mA)	Coil Resistance (ohms)±10%	Operate Voltage (VDC)	Release Voltage (VDC)
5	40.0	125	3.75	0.25
6	30.0	180	4.50	0.30
9	22.5	400	6.75	0.45
12	16.7	720	9.0	0.6
24	8.6	2880	18.0	1.2

*Not prepared 1 From C / 200mW type

Operate Data

Operate Voltage : 75% of nominal voltage or less
Release Voltage : 5% of nominal voltage or more
Operate Time : 10ms max
Release Time : 5ms max

Environmental Data

Temperature Range : -40℃～70℃
(on conditions without freezing and dew condensation)

Vibration, Mechanical : 10～55Hz. 1.5mm double amplitude
Operational : 10～55Hz. 1.5mm double amplitude
Shock, Mechanical : 980m/s² (Half -Sine wave of 6ms)
Operational : 98m/s²
(Half -Sine wave of 11ms, permitted duration 1ms)
Operating Humidity : 20～85%RH (Non-condensing)

Mechanical Data

Termination : PC board terminals
Enclosure : blank ; Flux Proof
H ; Wash Tight
Weight : Approx. 7g

TYCO Electronics Japan G.K. [3-5-8, Hisamoto Takatsu-ku Kawasaki, 213-8535, Japan, TEL: 81 44 844 8445]

Ordering Information for Relays

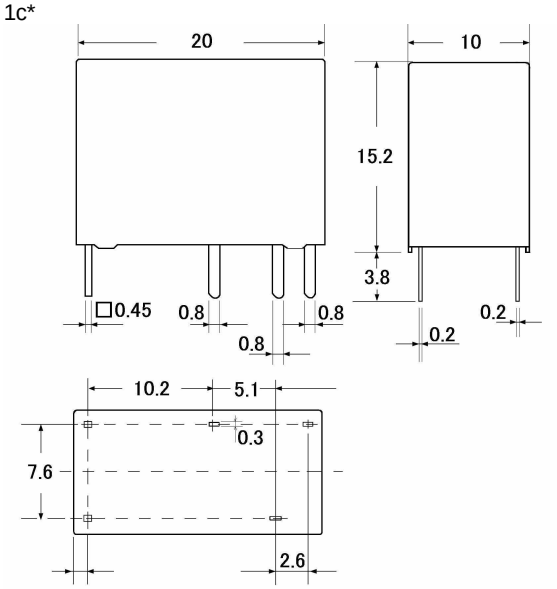
Example Part No.	PCH	-1	12	D	2	M	H	,000

1. Basic Series
   - PCH = Compact PCB mount type
2. Poles
   - 1 = 1pole
3. Coil Voltage
   - 05 = 5VDC
   - 06 = 6VDC
   - 09 = 9VDC
   - 12= 12VDC
   - 24 = 24VDC
   - 48 = 48VDC*
4. Coil Power
   - D = 400mW (1a,1c)
   - L = 200mW (1a)
5. Contact Material
   - 2 = $AgSnO_2$
6. Contact Arrangement
   - blank = 1c
   - M = 1a
7. Enclosure
   - blank = Flux Proof
   - H = Wash Tight
8. Suffix
   - ,000 = Standard model
   - Other Suffix = Custom model

*Coil voltage: 48VDC only can chose 400mW type.

Outline Dimensions (mm)

1c*

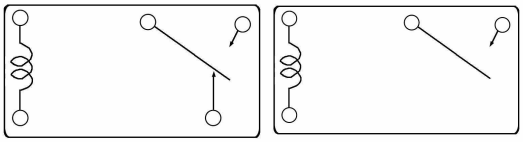


*1a Outline dimensions is omitted.

Tolerance: 0.99mm Max.: +/-0.1mm, 1-2.99mm: +/-0.2mm, 3mm Min.: +/-0.3mm

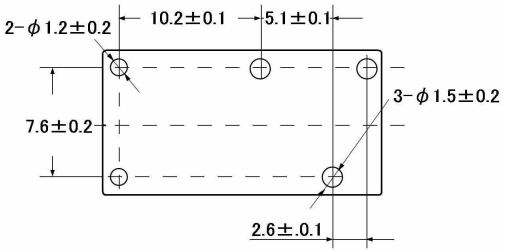
Wiring Diagram (Bottom View)

1c 1a

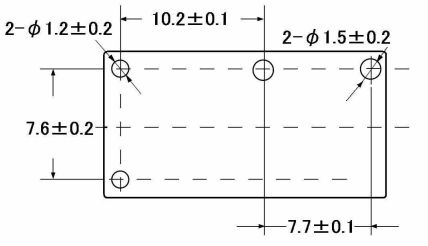


PC Board Layout (mm) (Bottom View)

1c

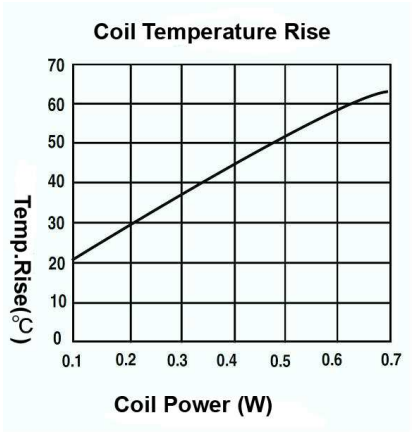


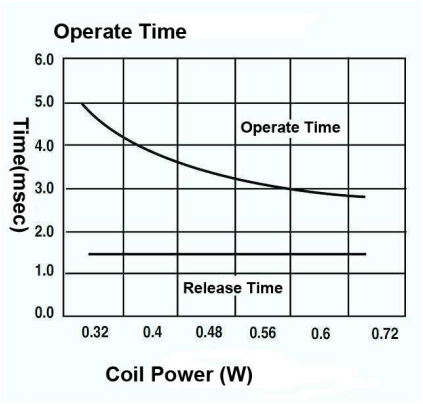
1a



TYCO Electronics Japan G.K. [3-5-8, Hisamoto Takatsu-ku Kawasaki, 213-8535, Japan, TEL: 81 44 844 8445]

Reference Data





*Above reference data is apply for 1 Form C / NO contact side, rated voltage: 277Vac / Coil power: 400mW.
*Please contact with us about the graph of expected electrical life.

TYCO Electronics Japan G.K. [3-5-8, Hisamoto Takatsu-ku Kawasaki, 213-8535, Japan, TEL: 81 44 844 8445]