

# Figure

Ratings 5A

Coil-Contacts 4,000VAC

#### Contact Data @ 23°C

Contact Arrangements: 1a (1FormA), 1c (1FormC) Contact Material: AgSnO<sub>2</sub> 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

# PCH series

# **5Amp Compact And High Capacity**

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

Air Conditioners, Refrigerators, Microwave Ovens

.97	File No.	E82292
<b>SP</b>	File No.	LR48471(400mW standard type)
VDE	RegNr.	119568
Cac	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.

#### Coil Data @ 23°C

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°C

400mW(Standard type)								
Rated Coil Voltage (VDC)	Rated Current (mA)	CoilOperateResistanceVoltage(ohms)±10%(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°C

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	125 3.75					
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 : -4°C  $\sim$  (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/s<sup>2</sup> (Half -Sine wave of 6ms) Operational : 98m/s<sup>2</sup> (Half -Sine wave of 11ms, permitted duration 1ms)

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

#### Mechanical Data

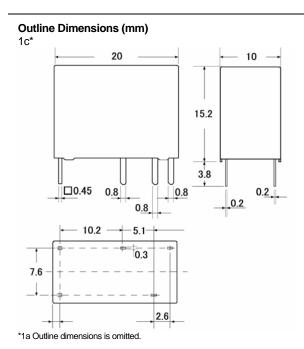
Termination : PC board terminals						
Enclosure :	blank ; Flux Proof					
	H ; Wash Tight					
Weight :	Approx. 7g					

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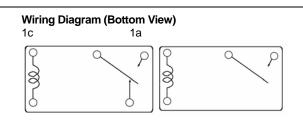
## **Ordering Information for Relays**

			Example	Part No.	PCH	-1	12	D	2	М	н	,000,
1. Basic Se	ries PCH =	Compact PCB mc	ount type									
2. Poles	1 =	1pole										
	age 05 = 06 = 09 =	5VDC 6VDC 9VDC	12= 24 = 48 =	12VDC 24VDC 48VDC*								
4. Coil Pow	er D = L =	400mW (1a,1c) 200mW (1a)										
5. Contact	Material 2 =	AgSnO <sub>2</sub>										
	Arrangement blank = M =	1c 1a										
	e blank = H =	Flux Proof Wash Tight										
	,000 = Other Suffix =	Standard model Custom model										

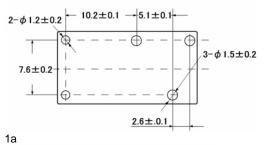
\*Coil voltage: 48VDC only can chose 400mW type.

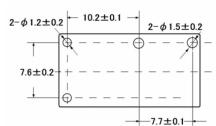


Tolerance: 0.99mm Max.: +/-0.1mm, 1-2.99mm: +/-0.2mm, 3mm Min.: +/-0.3mm



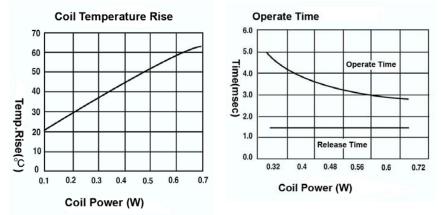
### PC Board Layout (mm) (Bottom View) 1c





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## **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.

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