CHMN Series 7A~10A MINIATURE POWER RELAY

Churod Electronics

FEATURES

- Outline dimension(20.4mm×7mm×15mm)
- 1 Form A(SPST-NO) arrangement
- Designed to meet UL/cUL,TUV,CQC requirements
- 4,000VAC dielectric strength between coil and contact
- F class Insulation System Avaliable
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type avaliable

File NO. E341422

File NO. R50174892

File NO. CQC10002043606

APPLICATION

Air Conditioner, Micro-oven, Washing Machine...etc

COIL PARAMETER

Coil voltage	3-24VDC	
Coil power	Standard	280mW

COIL DATA @23℃

CHMN-HA				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
3	93.3	32	2.25	0.15
5	56.0	89	3.75	0.25
6	46.7	129	4.50	0.30
9	31.1	289	6.75	0.45
12	23.3	514	9.00	0.60
18	15.6	1157	13.50	0.90
24	11.7	2057	18.00	1.20

CONTACT DATA

Contact arrangement	1 Form A(SPST-NO)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max. switching voltage	277V AC, 30V DC
Max. switching current	10A
Max. switching power	2500VA / 300W
Contact rating	HA: 7A 277VAC Resistive
	HA: 5A 30VDC, Resistive
	HA: 10A 277VAC, Resistive, 30K cycles
	HA: TV-5 120VAC 25K cycles
Mechanical endurance	5,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load)
Minimum load(reference value)	100mA@5VDC

CHARACTERISTICS

Operate voltage	75% of nominal voltage or less	
Release voltage	5% of nominal voltage or more	
Operate time (At nominal voltage)	10ms max.	
Release time(At nominal voltage)	4ms max.	
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	4,500 VAC, 50/60 Hz for 1 min
	Between open contacts	1,000 VAC, 50/60 Hz for 1 min
Surge voltage between coil and contacts		7,000V(1.2/50μs)
Vibration resistance	Destruction	10 to 55 Hz.,1.5mm double amplitude
	Malfunction	10 to 55 Hz.,1.5mm double amplitude
Shock resistance	Destruction	1,000 m/s2(100G approximately)
	Malfunction	100 m/s2(10G approximately)
Ambient temperature		Operating: (without icing or condensation) 5A/7A Type: -40~+105℃
Ambient humidity		Operating: 20% to 85% RH
Terminal		PCB terminals
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight),plastic cover.(RT II)
		S:Sealed,plastic cover.(RT III)
Weight		Approx. 4g

ORDERING INFORMATION

	CHMN	-S	-1	12	H	A	3	,000

1. Product Family

2. Enclosure

V = Vented(Flux-tight),plastic cover.(RT II)

S = Sealed,plastic cover.(RT III)

3. Number of Poles

1 = 1 pole

4. Rated Coil Voltage

03,05,06,09,12,18,24VDC

5. Coil Input

H= 280mW 7A/10A Contact rating

6. Contact Arrangement

A = Form A (SPST-NO)

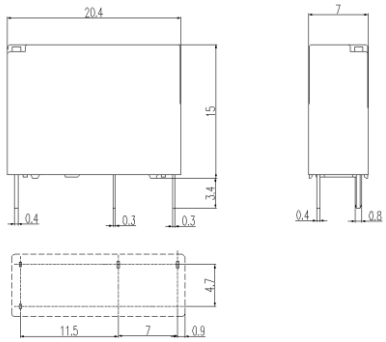
7. Contact material

3 = AgSnO

8. Additional numbers and /or letters

000-999，AAA-ZZZ，aaa-zzz or blank，which does not represent electrical changes, only for specific customer requirements

OUTLINE DIMENSION

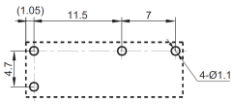


WIRING DIAGRAMS (BOTTOM VIEWS)

Unit:mm

PC BOARD LAYOUTS (BOTTOM VIEWS)

Unit:mm



Remark:

1) The reference tolerance in outline dimension:

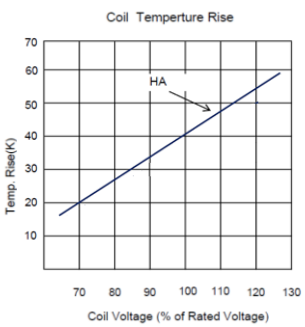
outline dimension ≤1mm, reference tolerance is ±0.2mm;

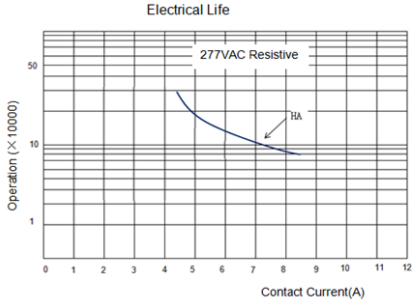
outline dimension > 1mm and ≤5mm, reference tolerance is ±0.3mm;

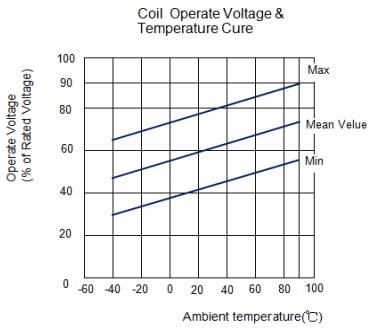
outline dimension > 5mm, reference tolerance is ±0.5mm.

2) The reference tolerance for PC Board layout is ±0.1mm.

Reference Date

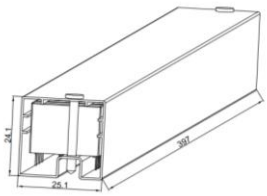






ES France - Département Composants & Modules
127 rue de Buzenval BP 26 - 92380 Garches
Tél. 01 47 95 99 89
Fax. 01 47 01 16 22
e-mail : comp@es-france.com
Site Web : www.es-france.com

Packaging Flgure



50 pcs inside a tube

3500 pcs inside a carton

Disclaimer:

The specification is for reference only,if you need more detail information,please contact Churod. We could not evaluate all the performance and all parameters for every possible application.And the user should be in a right position to choose the suitable product for their own application.If there is any new need,please contact Churod for the technical service.