

CHA SERIES 10A MINIATURE POWER RELAY

FEATURES

- Outline dimension (20.4mm×7.0mm×15.0mm)
- 1 Form A (SPST) contact arrangement
- Designed to meet cULus, TUV, CQC requirements
- 4,000VAC dielectric strength between coil and contact
- Sensitive and standard coils available
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available Glow



File NO. E341422



File NO. R50566722



File NO. CQC13002099323

APPLICATION

Audio, Industrial controls...etc

COIL PARAMETER

Coil voltage	3-24VDC	
Coil power	Sensitive	200mW
	Standard	540mW

COIL DATA@23°C

LA(250mW,Sensitive)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	50	100	3.75	0.25
6	41.7	144	4.5	0.3
9	27.8	324	6.75	0.45
12	20.8	576	9	0.6
18	13.9	1296	13.5	0.9
24	10.4	2304	18	1.2

DA(540mW,Standard)				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance ($\Omega \pm 10\%$)	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	108	46.3	3.75	0.25
6	90	66.7	4.5	0.3
9	60	150	6.75	0.45
12	45	266.7	9	0.6
18	30	600	13.5	0.9
24	22.5	1066.7	18	1.2
48	11.3	4266.7	36	2.4

CONTACT DATA

Contact arrangement	1 Form A (SPST)
Contact material	Ag Alloy
Initial contact resistance	100m Ω max.@6VDC,1A
Max. switching voltage	277VAC/30VDC
Max. switching current	10A
Max. switching power	2770VA/300W
Contact rating(Resistive Load)	10A 277VAC
	10A 30VDC
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min(rated load 1s on /9s off)
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)	15ms max.	
Release time(At nominal voltage)	5ms max.	
Insulation resistance	1,000 M Ω min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	4,000 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	10,000V(1.2/50us)	
Vibration resistance	Destruction	10 to 55 Hz, 1.5mm double amplitude
	Malfunction	10 to 55 Hz, 1.5mm double amplitude
Shock resistance	Destruction	1,000m/S ² (100G approximately)
	Malfunction	100m/S ² (10G approximately)
Ambient temperature	-40°C~+85°C (without icing or condensation)	
Ambient humidity	20%~85% RH	
Terminal	PCB terminal	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight),plastic cover.(RT II)	
Weight	Approx. 11g	

[Http://www.churod.com](http://www.churod.com)

2020 Rev.01 Churod Electronics Co., Ltd.



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

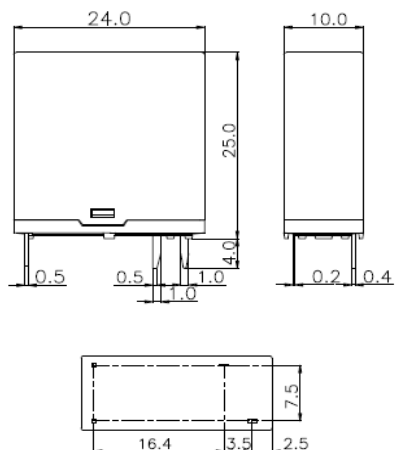


e-mail : comp@es-france.com
Site Web : www.es-france.com

ORDERING INFORMATION

	CHA	-V	-1	12	D	A	2	,000
1. Product Family								
2. Enclosure								
V = Vented (Flux-tight, RTII)								
3. Number of Poles								
1 = 1 pole								
4. Rated Coil Voltage								
05, 06, 09, 12, 18, 22, 24, 48VDC								
5. Coil Power								
D = Standard coil (540mW) L = Sensitive coil (250mW)								
6. Contact Arrangement								
A = Form A (SPST-NO)								
7. Contact material								
2 = AgSnO ₂								
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								

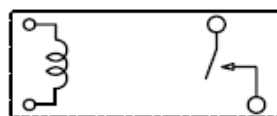
OUTLINE DIMENSION



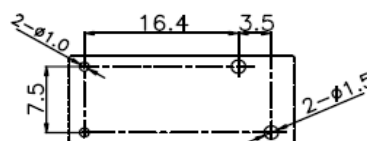
Remark:

- 1) The reference tolerance in outline dimension:
outline dimension $\leq 1\text{mm}$, reference tolerance is $\pm 0.2\text{mm}$;
outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, reference tolerance is $\pm 0.3\text{mm}$;
outline dimension $> 5\text{mm}$, reference tolerance is $\pm 0.5\text{mm}$.
- 2) The reference tolerance for PC Board layout is $\pm 0.1\text{mm}$.

WIRING DIAGRAMS (BOTTOM VIEWS)

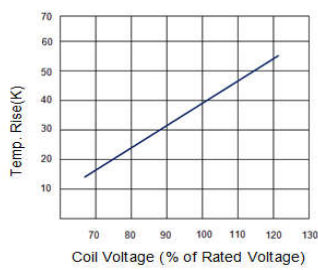


PC BOARD LAYOUTS (BOTTOM VIEWS)

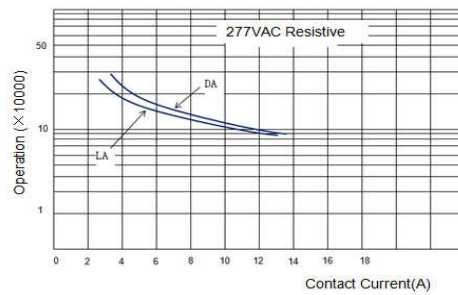


REFERENCE DATA

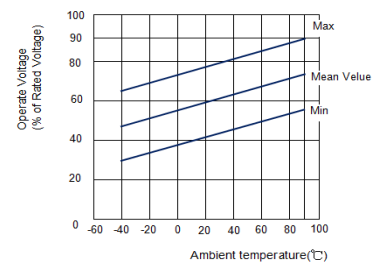
Coil Temperature Rise



Electrical Life

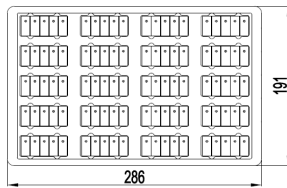


Coil Operate Voltage & Temperature Cure



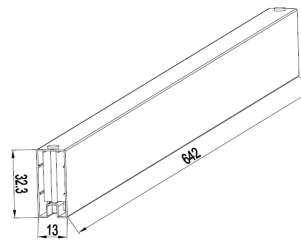
PACKAGING FIGURE

1.Box



100 pcs inside a box
1000 pcs inside a carton

2.Tube



25 pcs inside a tube
1000 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.

[Http://www.churod.com](http://www.churod.com)

2020 Rev.01 Churod Electronics Co., Ltd.



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