CHW Series

10-15A Miniature Power Relay

Churod Electronics

FEATURES

- Outline dimension (19.2mm×15.5mm×15.3mm)
- 1 Form A (SPST) or 1 Form C (SPDT)contact arrangement
- Designed to meet cULus,TUV,CQC requirements
- Flux-tight and Wash-tight version available
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available
- Glow wire type available

File NO. E341422

File NO. R50174892

File NO. CQC10002043606

APPLICATION

Appliances, Power Supplier,Industrial Control

COIL PARAMETER

Coil voltage	5-48VDC	
Coil power	Standard ver.	360mW

COIL DATA @23℃

CHW Standard				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω±10%)	Operate Voltage (VDC)	Release Voltage (VDC)
5	72	69	3.75	0.25
6	60	100	4.5	0.3
9	40	225	6.75	0.45
12	30	400	9.0	0.6
18	20	900	13.5	0.9
24	15	1600	18.0	1.2
48	7.5	6400	36.0	2.4

Note:

1) The data shown above are initial values.

2) For the Sealed type, the venting-hole should be opened in electronical endurance test.

CONTACT DATA

Contact arrangement	1 Form A (SPST) / 1 Form C(SPDT)	
Contact material	Ag Alloy	
Initial contact resistance	100mΩ max.(at 6VDC,1A)	
Max. switching voltage	277VAC	
Max. switching current	15A(NO) / 6A(NC)	
Max. switching power	NO: 4155VA/450W	
	NC: 1662VA/180W	
Contact rating	NO :	15A @250VAC
		10A @250VAC
		10A @ 30VDC
		2A FLA,14A LRA @ 277VAC
	NC:	6A @ 250VAC
		6A @ 30VDC
Mechanical endurance	10,000,000 ops Min.(no load)	
Electrical endurance (Resistive Load)	NO: 15A 250VAC, 30,000 ops	
	NO: 10A 250VAC, 100,000 ops	
	NC: 6A 250VAC, 50,000 ops	
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)		5ms max.
Insulation resistance		1,000 MΩ min. (at 500 VDC)
Dielectric strength	Between coil and contacts	2,000 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		6,000V(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	1,00m/S^2(10G approximately)
Ambient temperature		-40~+85℃ (without icing or condensation)
Ambient humidity		20%~85% RH
Termination		PCB terminals
Enclosure (94V-0 Flammability Ratings)		V: Vented(Flux-tight, RTII)
		S: Sealed(Wash-tight, RTIII)
Unit Weight		Approx. 9g

ORDERING INFORMATION

	CHW	-V	-1	12	D	A	2	--	,000

1. Product Family

2. Enclosure

V = Vented (Flux-tight, RTII)

S = Sealed (Wash-tight, RTIII)

3. Number of Poles

1=1 pole

4. Rated Coil Voltage

05,06,09,12,18,24,48VDC

5.Coil Power

D = Standard (360mW)

6. Contact Arrangement

A = Form A(SPST)

C = Form C(SPDT)

7.Contact material

2=$AgSnO_2$

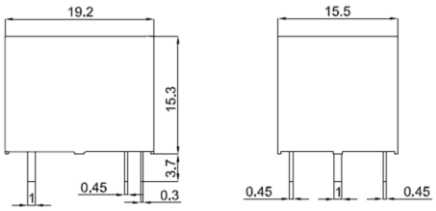
8.Conact Capacity

Blank = 10/15A

9. Additional numbers and /or letters

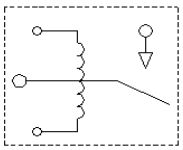
000-999，AAA-ZZZ，aaa-zzz or blank，which does not represent electrical changes, only for specific customer requirements,ex: (15A)=15A

OUTLINE DIMENSION

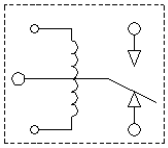


WIRING DIAGRAMS (BOTTOM VIEWS)

Form A

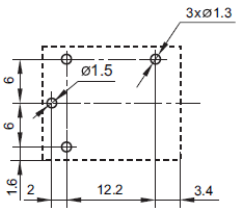


Form C

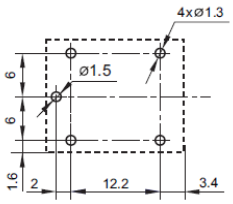


PC BOARD LAYOUTS (BOTTOM VIEWS)

Form A



Form C



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.