

**CHZ02 Series**

**16A MINIATURE POWER RELAY**

**FEATURES**

- Outline dimension (29.2mm×12.8mm×20.9mm)
- 1 Form A (SPST) or 1 Form C (SPDT) contact arrangement
- Designed to meet cULus, TUV, CQC requirements
- 5,000VAC dielectric strength between coil and contact
- Sensitive and standard coils available
- Class F type
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available Glow
- Glow wire type

**APPLICATION**

Appliances, Power Supplier, Industrial Control

**COIL PARAMETER**

Coil voltage	5-48VDC	
Coil power	Sensitive	540mW
	Standard	720mW

**COIL DATA @23°C**

CHZ-LA2/LC2(540mW), Sensitive				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	103.1	48.5	3.75	0.25
6	88.2	68	4.50	0.30
9	58.1	155	6.75	0.45
12	44.4	270	9.00	0.60
18	30	600	13.50	0.90
24	21.8	1,100	18.00	1.20
48	10.9	4,400	36.00	2.40

CHZ-DA2/DC2(720mW), Standard				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
5	138.9	36	3.75	0.25
6	123.7	48.5	4.50	0.30
9	78.3	115.0	6.75	0.45
12	60.0	200	9.00	0.60
18	40.0	450	15.50	0.90
24	29.3	820	18.00	1.20
48	14.5	3,300	36.00	2.40

**UL File NO. E341422**  
**TUV File NO. R50212872**  
**CQC File NO. CQC11002062205**



**CONTACT DATA**

Contact arrangement	1 Form A (SPST) / 1 Form C(SPDT)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC,1A
Max. switching voltage	250VAC/30V DC
Max. switching current	16A
Max. switching power	4,000VA/480W
Contact rating (Resistive Load)	16A(N.O)/8A(N.C)250VAC 16A(N.O)/8A(N.C)30VDC
Mechanical endurance	10,000,000 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)	20ms max.	
Release time (At nominal voltage)	8ms max.	
Insulation resistance	1,000 MΩ min. (at 500 VDC)	
Dielectric strength	Between coil and contacts	5,000 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(1.2/50μs)	
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/s <sup>2</sup> (100G approximately )
	Malfunction	100 m/s <sup>2</sup> (10G approximately)
Ambient temperature	Operating: -40~+85°C (without icing or condensation)	
Ambient humidity	Operating: 20% to 85% RH	
Terminal	PCB terminals	
Enclosure (94V-0 Flammability Ratings)	V: Vented(Flux-tight, RTII)	
	S: Sealed(Wash-tight, RTIII)	
Weight	Approx. 13g	

**ORDERING INFORMATION**

CHZ02 -V -1 12 D A 2 F '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=5VDC 06=6VDC 09=9VDC  
12=12VDC 24=24VDC 48=48VDC

**5. Coil Power**

D = Standard(720mW)  
L = Sensitive(540mW)

**6. Contact Arrangement**

A = Form A(SPST)  
C = Form A(SPST)

**7. Contact Arrangement**

2 =AgSnO

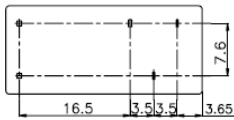
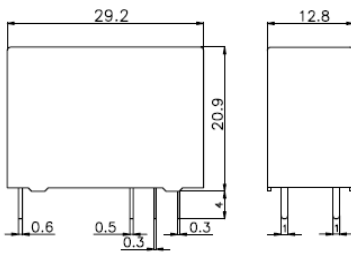
**8. Insulation System Designation**

F= Class F(155°C) (Blank)=Class A(105°C)

**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**

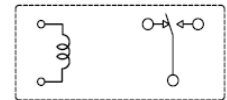


**WIRING DIAGRAMS (BOTTOM VIEWS)**

Unit:mm

Form A

Form C

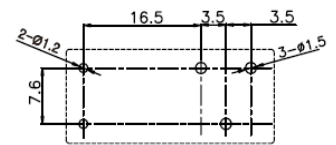
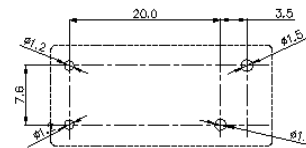


**PC BOARD LAYOUTS (BOTTOM VIEWS)**

Unit:mm

Form A

Form C



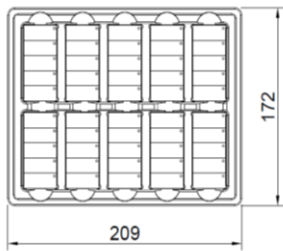
**Remark:** 1)The reference tolerance in outline dimension:  
outline dimension  $\leq 1$ mm, reference tolerance is  $\pm 0.2$ mm;  
outline dimension  $> 1$ mm and  $\leq 5$ mm, reference tolerance is  $\pm 0.3$ mm;  
outline dimension  $> 5$ mm, reference tolerance is  $\pm 0.5$ mm.  
2)The reference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

## Typical products

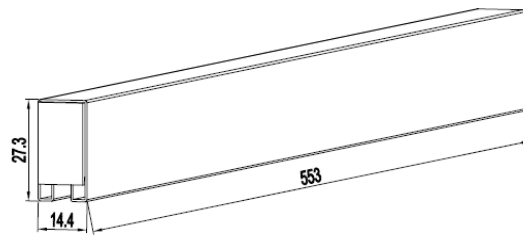
Product Description		Characteristic										
Product Name	Code	Coil Rated voltage	Contact material	Contact Load	Electrical endurance	Safety certification	Glow	Anti-explosio	Special Feature			
CHZ02-V-1**DA2	000	3V.5V.6V.9V. 12V.18V.24V .48V	AgSnO <sub>2</sub>	16A @250VAC	100000ops.min	UL/cUL,TUV,CQC						
CHZ02-S-1**DA2	000											
CHZ02-V-1**LA2	000											
CHZ02-S-1**LA2	000											
	600						•					
	F600						•	•				
CHZ02-V-1**DC2	300			16A @250VAC(NO) 8A @250V(NC)								
CHZ02-S-1**DC2	300											
CHZ02-V-1**DC2F	300											
CHZ02-S-1**DC2F	300											
CHZ02-V-1**LC2	300											
CHZ02-S-1**LC2	300											
CHZ02-V-1**LC2F	300											
CHZ02-S-1**LC2F	300											

Remarks: Special ordering for other requirements

## Packaging Figure



50 pcs inside a box  
1000pcs inside a carton



18 pcs inside a tube  
1152 pcs inside a carton