



# **CHSM Series**

FEATURES

- Outline dimension (20.2mm×10.0mm×11.0mm)
- Switching current 2A
- 2 Form C Contact arrangement
- TH Terminal
- non-latching 1 coil



## APPLICATION

Office and business equpment, measurement and control equipment, consumer electronics, set-top boxes, HiFi, medical equipment, automotive equipment



# COIL PARAMETER

Coil voltage	3-24VDC			
	Sensitive	360mW		
Coil power	Standard	450mW		
	Low Power	200mW		



# COIL DATA @23°C

CHSM-D(450mW,Standard)						
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)		
5	89.2	56.0	3.75	0.50		
6	6 75.0 80.0 4.50		4.50	0.60		
12	37.5	7.5 320.0 9.00		1.20		
24	18.75	1280.0	18.00	2.40		

CHSM-L(360mW,Sensitive)						
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)		
5	72.4	69	3.75	0.50		
6	60.0	100	4.50	0.60		
9	40.0	225	6.75	0.90		
12	30.0	400	9.00	1.20		
24	7.5	1600	18.00	2.40		

CHSM-L1(200mW,Low Power)						
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)		
3	66.6	45	2.25	0.3		
5	40.0	125	3.75	0.5		
6	33.3	180	4.50	0.6		
9	22.2	405	6.75	0.9		
12	16.6	720	9.00	1.2		
24	24 8.3		18.00	2.4		



# CONTACT DATA

Contact arrangement	2 Form C
Contact material	Gold-plated AgNi
Initial contact resistance	50mΩ max.@6VDC,10mA
Max. switching voltage	220VA/250VAC
Min. switching voltage	100 u V
Contact ratio (Paniativa Land)	2A 30VDC,0.24A 220VDC
Contact rating(Resistive Load)	1A 125VAC,0.54A 250VDC
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load)
Minimum load	10mA@20mV



# CHARACTERISTICS

Operate	time (At nominal voltage)	10ms max.				
Release time(At nominal voltage)		5ms max.				
Insulation resistance		1,000 MΩ min. (at 500 VDC)				
Dielectric	Between coil and contacts	500VAC, 50/60 Hz for 1 min(<1mA)				
strength	Between open contacts	1000VAC, 50/60 Hz for 1 min(<1mA)				
Vibration resistance(functional)		10G,10 to 500 Hz				
Shock resistance(destructive)		20G approximately				
Ambient temperature		Operating: -40~+85℃				
Terminal		PCB terminals				
Enclosure (94V-0 Flammability Ratings)		S: Sealed(Wash-tight, RTIII)				
Weight		Approx. 5g				

3

C

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### ORDERING INFORMATION

1. Product Family
2. Enclosure
S=Sealed(Wash-tight, RTIII)
3. Number of Poles

2=2 pole

4. Rated Coil Voltage

05=5VDC 06=6VDC 09=9VDC 12=12VDC 24=24VDC

5. Coil Power

D = Standard coil(450mW) L=Sensitive coil(360mW) L1=Low power coil(200mW)

6. Contact Arrangement

C = Form C

7. Conact Arrangement

3 = AgNi with gold plating

8. Additional numbers and /or letters
000-999. AAA-777. aaa-777 or blank, which does not ren

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

**CHSM** 

-S

-2

12

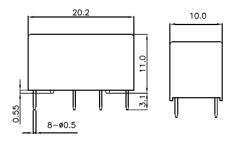
L

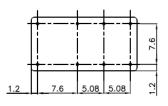
### Typical products

Product Descri	ption	Characteristic										
Product Name	Code	Coil Rated voltage	Contact material	Contact Load	Electrical endurance	Safety certification	Glow	Anti- explosio	Special Feature			
CHSM-S-2**DC3	000	5V、6V、9V 、12V、24V	5)/ 0)/ 0)/	51/ 01/ 01/	5)/ 0)/ 0)/	5)/ 6)/ 6)/						
CHSM-S-2**LC3	000			1A@125VAC	25VAC 100000ops.min							
CHSM-S-2**L1C3	000											

Remarks: Special ordering for other requirements

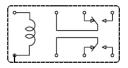
### OUTLINE DIMENSION





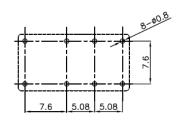
### WIRING DIAGRAMS (BOTTOM VIEWS)

Unit:mm



### PC BOARD LAYOUTS (BOTTOM VIEWS)

Unit:mm



### **Remark:** 1)The reference tolerance in outline dimension:

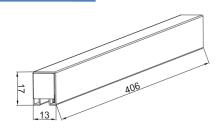
outline dimension ≤1mm, reference tolerance is ±0.2mm;

outline dimension >1mm and  $\leq$ 5mm, reference tolerance is ±0.3mm;

outline dimension >5mm, reference tolerance is  $\pm 0.5$ mm.

2)The reference tolerance for PC Board layout is  $\pm 0.1$ mm.

# Packaging Figure



25 pcs inside a tube 875 pcs inside a carton