

CHM Series

5A 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
- RoHS compliance
- REACH SvHC compliance
- Halogen-Free type available Glow
- Glow wire type

APPLICATION

Air Conditioner, Washing Machine, Microwave Oven,
Power Meter, Industrial Control

COIL PARAMETER

Coil voltage	3-24VDC
Coil power	200mW

COIL DATA @23°C

CHM				
Nominal coil voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω)±10%	Operate Voltage (VDC Max.)	Release Voltage (VDC Min.)
3	66.7	45	2.25	0.15
5	40.0	125	3.75	0.25
6	33.3	180	4.50	0.30
9	22.5	405	6.75	0.45
12	16.7	720	9.00	0.60
18	11.1	1620	13.50	0.90
24	8.6	2880	18.00	1.20

UL File NO. E341422
TUV File NO. R50196152
CQC File NO. CQC11002055116



CONTACT DATA

Contact arrangement	1 Form A (SPST)
Contact material	Ag Alloy
Initial contact resistance	100mΩ max.@6VDC, 1A
Max. switching voltage	250VAC/30V DC
Max. switching current	5A
Max. switching power	1,250VA/150W
Contact rating(Resistive Load)	5A@250VAC
	5A@30VDC
Mechanical endurance	10,000,000 ops Min.(no load)
Electrical endurance	100,000 ops Min.(rated load)
Minimum load	100mA@5VDC

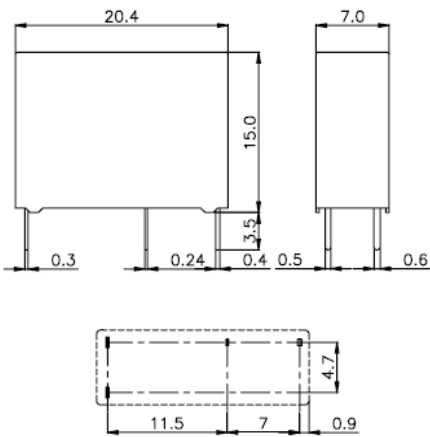
CHARACTERISTICS

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	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	7,000V(1.2/50μs)	
Vibration esistance	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 ² (100G approximately)
	Malfunction	100 m/s ² (10G approximately)
Ambient temperature	Operating: -40~+90°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. 4g	

ORDERING INFORMATION

	CHM	-V	-1	12	D	A	3	'000
1. Product Family	[Line connecting to CHM]							
2. Enclosure V=Vented(Flux-tight, RTII) S=Sealed(Wash-tight, RTIII)	[Line connecting to -V]							
3. Number of Poles 1=1 pole	[Line connecting to -1]							
4. Rated Coil Voltage 03=3VDC 05=5VDC 06=6VDC 09=9VDC 12=12VDC 18=18VDC 24=24VDC	[Line connecting to 12]							
5. Coil Power D = Standard(200mW)	[Line connecting to D]							
6. Contact Arrangement A = Form A(SPST)	[Line connecting to A]							
7. Contact Arrangement 3 = Ag alloy	[Line connecting to 3]							
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	[Line connecting to '000]							

OUTLINE DIMENSION



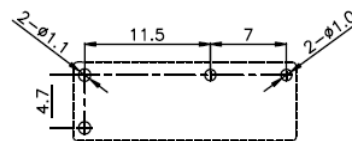
WIRING DIAGRAMS (BOTTOM VIEWS)

Unit:mm



PC BOARD LAYOUTS (BOTTOM VIEWS)

Unit:mm



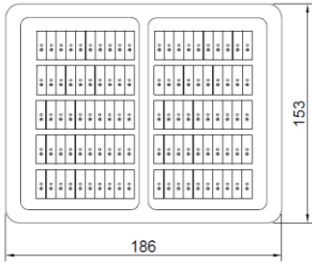
Remark: 1)The reference tolerance in outline dimension:
 outline dimension ≤ 1 mm, reference tolerance is ± 0.2 mm;
 outline dimension > 1 mm and ≤ 5 mm, reference tolerance is ± 0.3 mm;
 outline dimension > 5 mm, reference tolerance is ± 0.5 mm.
 2)The reference tolerance for PC Board layout is ± 0.1 mm.

Typical products

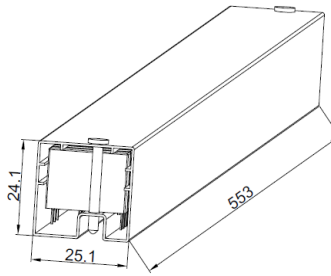
Product Description		Characteristic							
Product Name	Code	Coil Rated voltage	Contact material	Contact Load	Electrical endurance	Safety certification	Glow	Anti-explosion	Special Feature
CHM-V-1**DA3	000	3V.5V.6V.9V. 12V.18V.24V .48V	Ag Alloy	5A @250VAC	100000ops.min	UL/cUL,TUV,CQC			
	200						●		
CHM-S-1**DA3	000								
	200						●		
	210						●		contact resistance: 50mΩmax
	600						●		
	700						●		
	F600						●	●	
F700	●	●							

Remarks: Special ordering for other requirements

Packaging Figure



A Box of 100 Products



One Tupe Holds 50 Products