

Features

- 15A switching capability
- Standard T73 mounting feet
- High sensitivity type available with 250mW coil power consumption
- Contact arrangement: 1A, 1C
- Environmental friendly product(RoHS compliant)
- Outline Dimensions:(19.2×15.5×15.0)mm
- Main application:Smart home, Single fire switch



TV-10 C 

CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A, 1B, 1C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		AgSnO ₂
Rated value	Rated load(Resistance load)		12A 277VAC 15A 125VAC
	Max.switching voltage		277VAC
	Max.switching current		16A
	Max.switching capacity		3324VA
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	750VAC,1min
		Between coil&contacts	1500VAC,1min
	Set time		≤10ms
	Reset time		≤10ms
Mechanical performance	Shock resistance	Functional	98m/s ² (10g)
		Destructive	980m/s ² (100g)
Vibration resistance		10Hz~55Hz 1.5mm DA	
Endurance	Mechanical		1×10 ⁷ ops
	Electrical(Room temperature)		15A 125VAC 1×10 ⁴ ops(ON/OFF=1s/9s) 12A 277VAC 5×10 ⁴ ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx.9g
Construction			Plastic sealed,Flux proofed

■ COIL DATA(23°C)

■ Single coil standard

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.4	≤2.4	133.3mA	22.5Ω	400mW	DC 4.5V
DC 5V	≤4.0	≤4.0	80mA	62.5Ω		DC 7.5V
DC 12V	≤9.6	≤9.6	33.3mA	360Ω		DC 18V
DC 24V	≤19.2	≤19.2	16.7mA	1440Ω		DC 36V
DC 48V	≤38.4	≤38.4	8.3mA	5760Ω		DC 72V

■ Double coils standard

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.4	≤2.4	266.7/266.7mA	11.25/11.25Ω	800mW	DC 4.5V
DC 5V	≤4.0	≤4.0	160/160mA	31.5/31.5Ω		DC 7.5V
DC 12V	≤9.6	≤9.6	66.7/66.7mA	180/180Ω		DC 18V
DC 24V	≤19.2	≤19.2	33.3/33.3mA	720/720Ω		DC 36V
DC 48V	≤38.4	≤38.4	16.7/16.7mA	2880/2880Ω		DC 72V

■ Single coil sensitive

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.4	≤2.4	83.3mA	36Ω	250mW	DC 4.5V
DC 5V	≤4.0	≤4.0	50mA	100Ω		DC 7.5V
DC 12V	≤9.6	≤9.6	20.8mA	576Ω		DC 18V
DC 24V	≤19.2	≤19.2	10.4mA	2304Ω		DC 36V
DC 48V	≤38.4	≤38.4	5.2mA	9216Ω		DC 72V

■ Double coils sensitive

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.4	≤2.4	166.7/166.7mA	18/18Ω	500mW	DC 4.5V
DC 5V	≤4.0	≤4.0	100/100mA	50/50Ω		DC 7.5V
DC 12V	≤9.6	≤9.6	41.7/41.7mA	288/288Ω		DC 18V
DC 24V	≤19.2	≤19.2	20.8/20.8mA	1152/1152Ω		DC 36V
DC 48V	≤38.4	≤38.4	10.4/10.4mA	4608/4608Ω		DC 72V

ORDERING INFORMATION

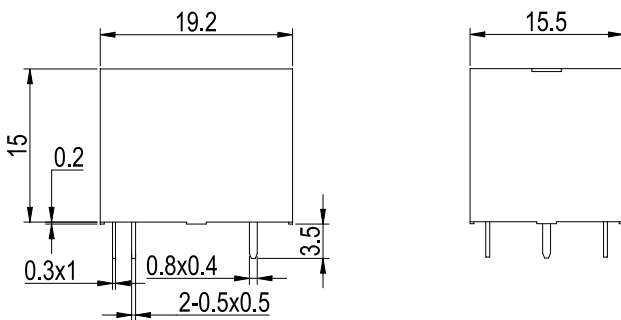
FH14L -1A S T L -L1 R -XXX DC12V

- ① Type
- ② Contact arrangement: 1A=1 open contacts, 1B=1 close contacts, 1C=1 switched contacts
- ③ Construction(1): Nil=Flux proofed, S=Plastic sealed
- ④ Contact material: T=AgSnO₂
- ⑤ Coil power: Nil=Standard, L=Sensitive
- ⑥ Coil type: L1=1 coil latching L2=2 coils latching
- ⑦ Operation polarity: Nil=standard polarity R=reversed polarity
- ⑧ Customer special code: numbers or letters denote customer's requirements
- ⑨ Coil specification: DC3/5/12/24/48V

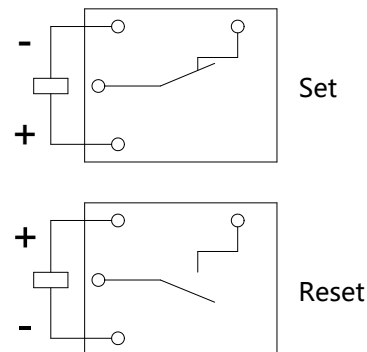
- (1) When used in clean environment(excluding H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Plastic sealed.

OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

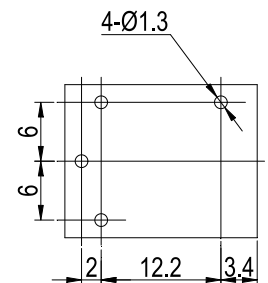
1A/1B Outline Dimensions
(Single coil latching)



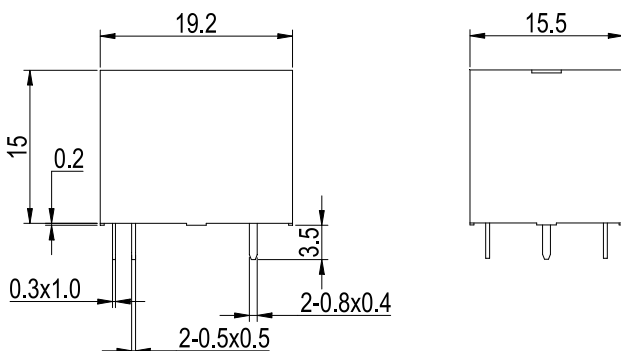
Wiring Diagram
(Bottom view)



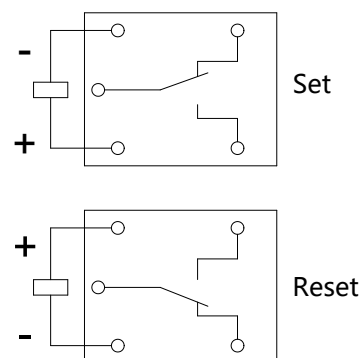
PCB Layout
(Bottom view)



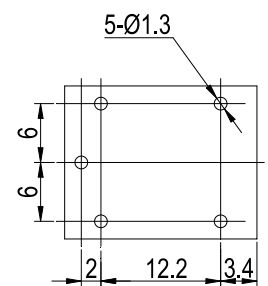
1C Outline Dimensions
(Single coil latching)



Wiring Diagram
(Bottom view)

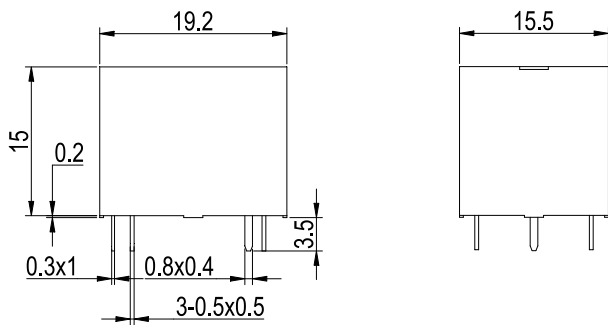


PCB Layout
(Bottom view)

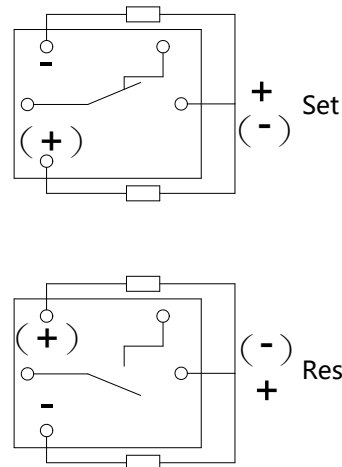


OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit:mm)

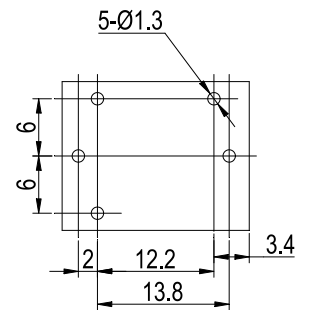
1A/1B Outline Dimensions
(Double coils latching)



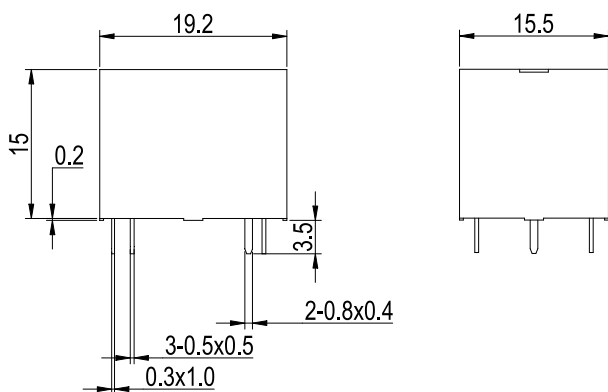
Wiring Diagram
(Bottom view)



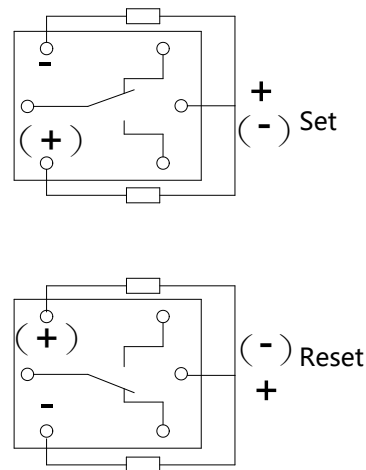
PCB Layout
(Bottom view)



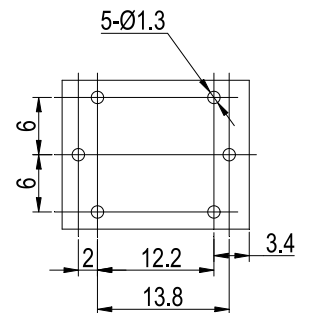
1C Outline Dimensions
(Double coils latching)



Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



Remark:(1)In case of no tolerance shown in outline dimension:outline dimension \leq 1mm,tolerance should be \pm 0.2mm;outline dimension $>$ 1mm and $<$ 5mm,tolerance should be \pm 0.3mm;outline dimension \geq 5mm,tolerance should be \pm 0.5mm.

(2) The tolerance without indicating for PCB layout is always \pm 0.1mm.

■ SAFETY APPROVAL RATINGS

Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	1A, 1B, 1C(NO)	AgSnO ₂	16A/15A	250/125VAC	85℃
				5A	120VAC(E-bellast)	85℃
				TV-10	250/125VAC	85℃
TUV	/	/	/	/		
CQC	CQC21002307814	1A, 1B, 1C(NO)	AgSnO ₂	12A	277VAC	85℃
				15A	125VAC	85℃
		1C(NO/NC)		12A	277VAC	85℃

■ NOTICE

- ① With the consideration of shock risen from transit and relay mounting, relay's initial state might be changed ,please impose pulse voltage to reset the relay before using(rated coil voltage, impulse width \geq 5 times operation time.
- ② In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;
- ③ In order to maintain the "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize the voltage to "set" coil and "reset" coil simultaneously.
- ④ The specification is for reference only.Specifications subject to change without notice.