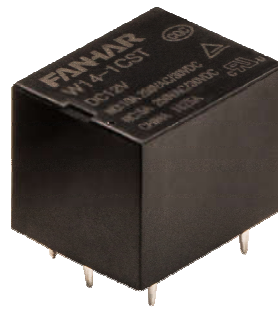


## Features

- 15A switching capability
- Contact arrangement: 1A, 1C
- Can supply the product meet the standards of IEC60335-1
- We can provide the product with ambient temperature is 105°C
- UL insulation system: Class F
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (19.0×15.2×15.2) mm
- Main application: Home appliance、Smart home



**TV-5** c **UL**® **US**

## CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A、1B、1C
	Contact resistance		100mΩ(6VDC 1A)
	Contact material		AgSnO <sub>2</sub>
Rated value	Rated load(Resistance load)		10A 250VAC/30VDC 15A 125VAC
	Max.switching voltage		277VAC/30VDC
	Max.switching current		15A
	Max.switching capacity		2500VA/300W
	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
	Operate time		≤10ms
	Release time		≤5ms
Mechanical performance	Shock resistance	Functional	98m/s <sup>2</sup> (10g)
		Destructive	980m/s <sup>2</sup> (100g)
Vibration resistance		10Hz~55Hz 1.5mm DA	
Endurance	Mechanical		1×10 <sup>7</sup> ops
	Electrical	5A 250VAC/30VDC	1×10 <sup>5</sup> ops(ON/OFF=1s/9s)
		10A 250VAC/30VDC	5×10 <sup>4</sup> ops(ON/OFF=1s/9s)
		15A 125VAC	5×10 <sup>4</sup> ops(ON/OFF=1s/9s)
		1/2HP 125VAC(motor)	3×10 <sup>4</sup> ops(ON/OFF=1s/9s)
600W 120VAC(LED lamp)		2.5×10 <sup>4</sup> ops (ON/OFF=1s/9s)	
Operate condition	Ambient temperature		-40°C~85°C
	Humidity		5% to 90%
Termination		PCB	
Unit weight		Approx.7g	
Construction		Plastic sealed、Flux proofed	

## COIL DATA(23°C)

### Standard Type

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.25	≥0.15	120mA	25Ω	360mW	130%Nominal Voltage
DC 5V	≤3.75	≥0.25	72mA	69.4Ω		
DC 6V	≤4.50	≥0.30	60mA	100Ω		
DC 9V	≤6.75	≥0.45	40mA	225Ω		
DC 12V	≤9.00	≥0.60	30mA	400Ω		
DC 15V	≤11.25	≥0.75	24mA	625Ω		
DC 18V	≤13.50	≥0.90	20mA	900Ω		
DC 24V	≤18.00	≥1.20	15mA	1600Ω		
DC 48V	≤36.00	≥2.40	7.5mA	6400Ω		

### High Power

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.25	≥0.15	150mA	20Ω	450mW	130%Nominal Voltage
DC 5V	≤3.75	≥0.25	90mA	55.6Ω		
DC 6V	≤4.50	≥0.30	75mA	80Ω		
DC 9V	≤6.75	≥0.45	50mA	180Ω		
DC 12V	≤9.00	≥0.60	37.5mA	320Ω		
DC 15V	≤11.25	≥0.75	30mA	500Ω		
DC 18V	≤13.50	≥0.90	25mA	720Ω		
DC 24V	≤18.00	≥1.20	18.75mA	1280Ω		
DC 48V	≤36.00	≥2.40	9.4mA	5120Ω		

## ORDERING INFORMATION

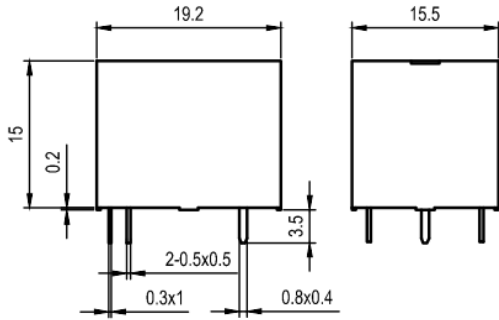
W14 -1A S T H -XXX DC12V

- ① Type
- ② Contact arrangement(1): 1A=1open contacts、1B=1close contacts  
1C=1 switched contacts
- ③ Construction: Nil=Flux proofed, S=Plastic sealed
- ④ Contact material: T=AgSnO<sub>2</sub>
- ⑤ Coil power: Nil=360mW、H=450mW
- ⑥ Customer special code: numbers or letters denote customer's requirements
- ⑦ Coil specification: DC3/5/6/9/12/15/18/24/48V

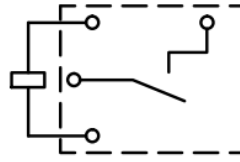
Notes: (1)If need the contact arrangement is 1B,please contact with the salesman to ask for the outline dimensions,wiring diagram and PC board layout.

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

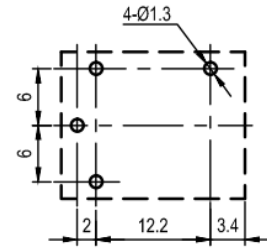
1A Outline Dimensions



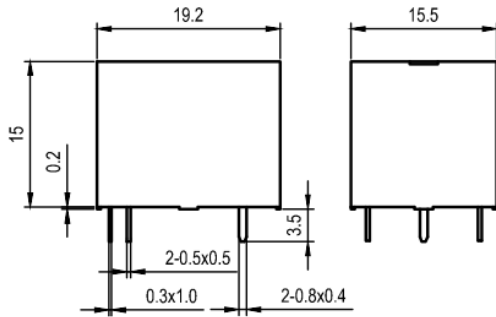
Wiring Diagram  
(Bottom view)



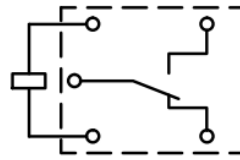
PCB Layout  
(Bottom view)



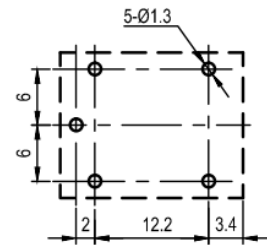
1C Outline Dimensions



Wiring Diagram  
(Bottom view)



PCB Layout  
(Bottom view)

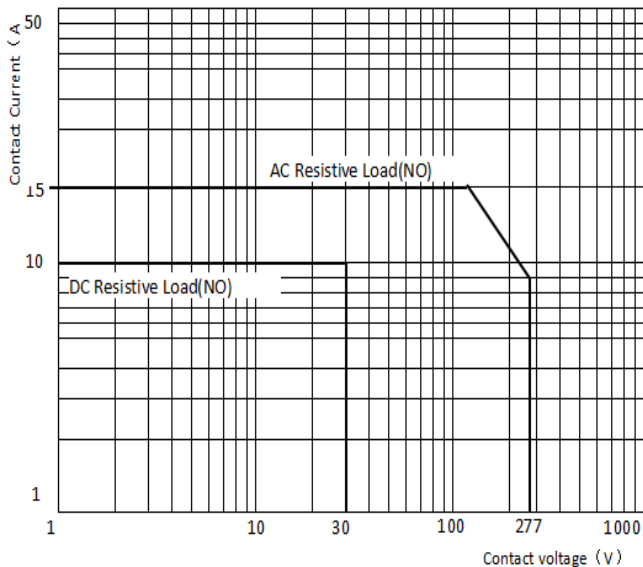


Remark: (1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$  mm, tolerance should be  $\pm 0.2$  mm; outline dimension  $> 1$  mm and  $< 5$  mm, tolerance should be  $\pm 0.3$  mm; outline dimension  $\geq 5$  mm, tolerance should be  $\pm 0.5$  mm.

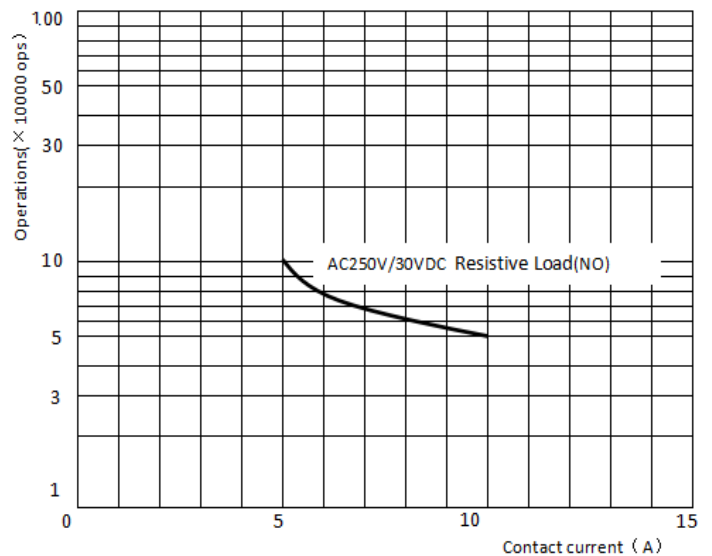
(2) The tolerance without indicating for PCB layout is always  $\pm 0.1$  mm.

## PERFORMANCE CURVES

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



## SAFETY APPROVAL RATINGS

Approval	File No.	Contact arrangement	Contact arrangement	Approved ratings		
UL/C-UL	E475405	1A、1C(NO)	AgSnO <sub>2</sub>	10A/5A	250/125VAC/30VDC	85℃
				TV-5	250/125VAC	85℃
				600W	120VAC(LED lamp)	85℃
		1/2HP		125VAC	85℃	
		10A		250/125VAC	105℃	
		15A		125VAC	105℃	
		1B、1C(NC)		5A	250VAC/30VDC	85℃
				10A	250/125VAC	105℃
TUV	R 50323750	1A、1C(NO)	AgSnO <sub>2</sub>	10A	250VAC	105℃
				15A	125VAC	105℃
		1B、1C(NC)		10A	250VAC	105℃
		1C(NO/NC)		10A/5A	250VAC/30VDC	85℃
CQC	CQC15002135519	1A、1C(NO)	AgSnO <sub>2</sub>	10A	250/125VAC/30VDC	85℃
				15A	125VAC	85℃
				15A	250/125VAC	105℃
		10A		250/125VAC	85℃/105℃	
		5A		30VDC	85℃	
		1B、1C(NC)				

## NOTICE

- ① If the relay needs to be cleaned or used in bad environment(e.g:dust or organic gas),we recommend plastic sealed type.
- ② The specification is for reference only,specifications subject to change without notice.