W14 Power Relay

Features

- 15A switching capability
- Contact arrangement:1A,1C
- Provide the product meet the standards of IEC60335-1
- Products with operating temperature of 105℃ are available
- UL insulation system:Class F
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(19.2×15.5×15.0)mm
- Main application:Home appliance、Smart home

TV-5 c US

■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A、1B、1C
	Contact resistance		≤100mΩ(6VDC 1A)
	Contact material		$AgSnO_2$
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/s²(10g)
		Destructive	980m/s²(100g)
	Vibration resistance		10Hz~55Hz 1.5mm DA
Endurance	Mechanical		1×10^6ops
	Electrical(Room temperature)		5A 250VAC/30VDC 1×10^5ops(ON/OFF=1s/9s) 10A 250VAC/30VDC 5×10^4ops(ON/OFF=1s/9s) 15A 125VAC 5×10^4ops(ON/OFF=1s/9s) 1/2HP 125VAC(motor) 3×10^4ops(ON/OFF=1s/9s) 600W 120VAC(LED lamp) 2.5×10^4ops (ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85/105℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx.7g
Construction			Plastic sealed、Flux proofed

■ COIL DATA(23℃)

■ Standard Type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.25	≥0.15	120mA	25Ω	360mW	DC 3.9V
DC 5V	≤3.75	≥0.25	72mA	69.4Ω		DC 6.5V
DC 6V	≤4.50	≥0.30	60mA	100Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	40mA	225Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	30mA	400Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	24mA	625Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	20mA	900Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	15mA	1600Ω		DC 31.2V
DC 48V	≤36.00	≥2.40	7.5mA	6400Ω		DC 62.4V

■ ORDERING INFORMATION

W14 -1A S T -XXX DC12V

① Type

② Contact arrangement(1):1A=1 open contacts、
1B=1 close contacts 1C=1 switched contacts

③ Construction(2):Nil=Flux proofed,S=Plastic sealed

④ Contact material:T=$AgSnO_2$

⑤ Customer special code:numbers or letters denote customer's requirements

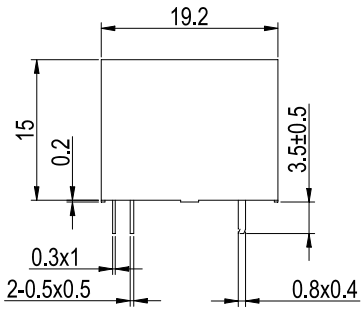
⑥ Coil specification:DC3/5/6/9/12/15/18/24/48V

(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.

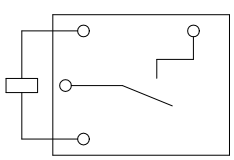
(2) When used in clean environment(excluding H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Plastic sealed.

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

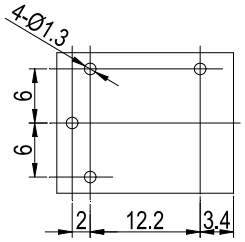
1A Outline Dimensions



Wiring Diagram (Bottom view)



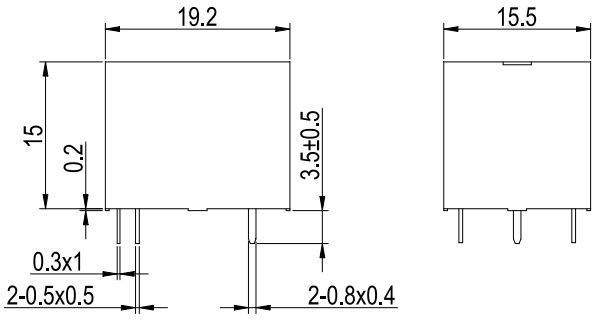
PCB Layout (Bottom view)



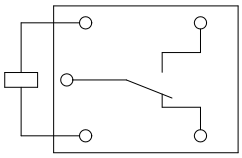
■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1C

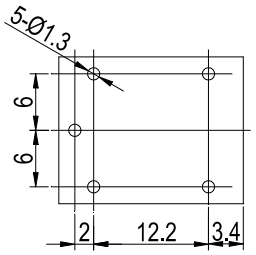
Outline Dimensions



Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



Remark: (1) In case of no tolerance shown in outline dimension:outline dimension≤1mm,tolerance should be±0.2mm;outline dimension >1mm and <5mm,tolerance should be ±0.3mm;outline dimension≥5mm,tolerance should be ±0.5mm.

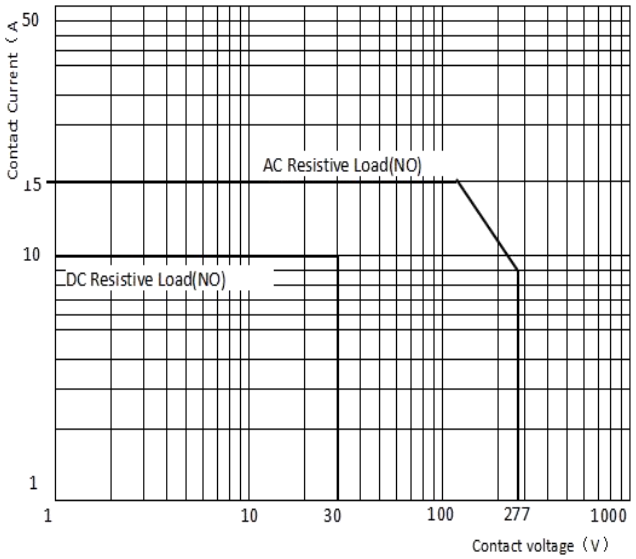
(2) The tolerance without indicating for PCB layout is always ±0.1mm.

■ SAFETY APPROVAL RATINGS

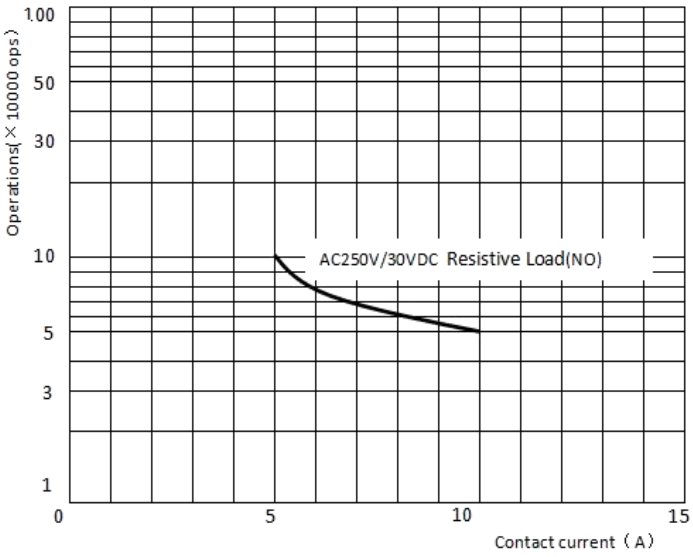
Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	1A、1C(NO)	$AgSnO_2$	10A/5A	250/125VAC/30VDC	85℃
				TV-5	250/125VAC	85℃
				600W	120VAC(LED lamp)	85℃
				1/2HP	125VAC	85℃
				10A	250/125VAC	105℃
				15A	125VAC	105℃
		1B、1C(NC)		5A	250VAC/30VDC	85℃
				10A	250/125VAC	105℃
TUV	R 50323750	1A、1C(NO)	$AgSnO_2$	10A	250VAC	105℃
				15A	125VAC	105℃
		1B、1C(NC)		10A	250VAC	105℃
		1C(NO/NC)		10A/5A	250VAC/30VDC	85℃
				10A/5A	250VAC	105℃
CQC	CQC15002135519	1A、1C(NO)	$AgSnO_2$	10A	250/125VAC/30VDC	85℃
				15A	125VAC	85℃
				15A	250/125VAC	105℃
		1B、1C(NC)		10A	250/125VAC	85℃/105℃
				5A	30VDC	85℃

■ PERFORMANCE CURVES

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



■ NOTICE

① In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;

② The specification is for reference only.Specifications subject to change without notice.