

Features

- 15A switching capability
- Products with operating temperature of 105°C are available
- UL insulation system:Class F
- Subminiature,standard PCB terminals.
- Outline Dimensions:(20.0×16.2×20.5)mm
- Main application: household appliances, smart home



TV-5 C  US

CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A, 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)		100MΩ(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 ² (10g)
		Destructive	980m/s ² (100g)
Vibration resistance		10Hz~55Hz 1.5mm DA	
Endurance	Mechanical		1×10 ⁷ ops
	Electrical(Room temperature)	5A 250VAC/30VDC	1×10 ⁵ ops(ON/OFF=1s/9s)
		10A 250VAC/30VDC	5×10 ⁴ ops(ON/OFF=1s/9s)
		15A 125VAC	5×10 ⁴ ops(ON/OFF=1s/9s)
		1/2HP 120VAC(motor)	3×10 ⁴ ops(ON/OFF=1s/9s)
		600W 120VAC(LED lamp)	2.5×10 ⁴ ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40°C~85°C/105°C
	Humidity		5% to 90%
Termination		PCB	
Unit weight		Approx.12.5g	
Construction		Plastic sealed, Flux proofed	

COIL DATA(23°C)

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

W14T -1A S T -XXX DC12V

- ① Type
- ② Contact arrangement: 1A=1open contacts, 1C=1 switched contacts
- ③ Construction(1): Nil=Flux proofed, S=Plastic sealed
- ④ Contact material: T=AgSnO₂
- ⑤ Customer special code: numbers or letters denote customer's requirements
- ⑥ Coil specification: DC3/5/6/9/12/15/18/24/48V

- (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.

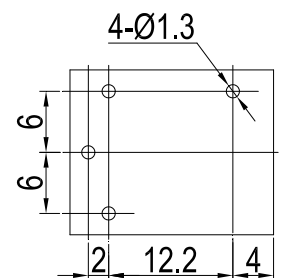
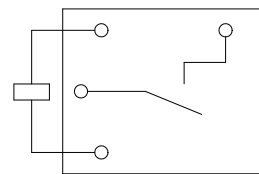
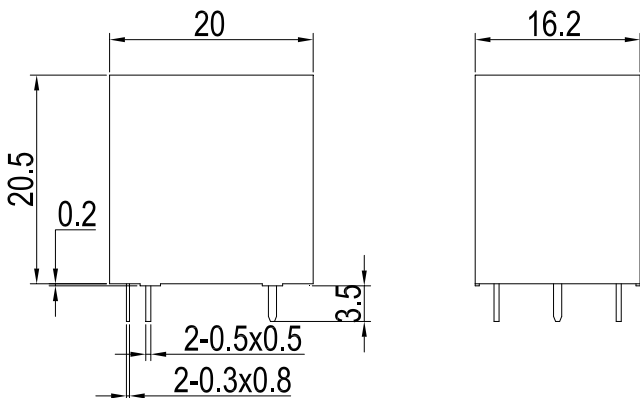
OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A

Outline Dimensions

Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)



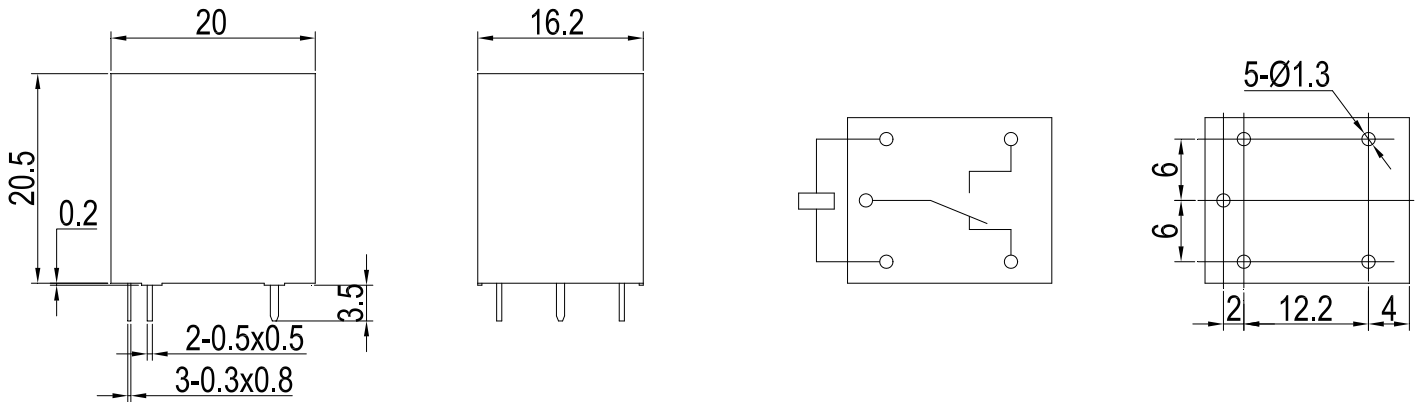
■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit:mm)

1C

Outline Dimensions

Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)



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

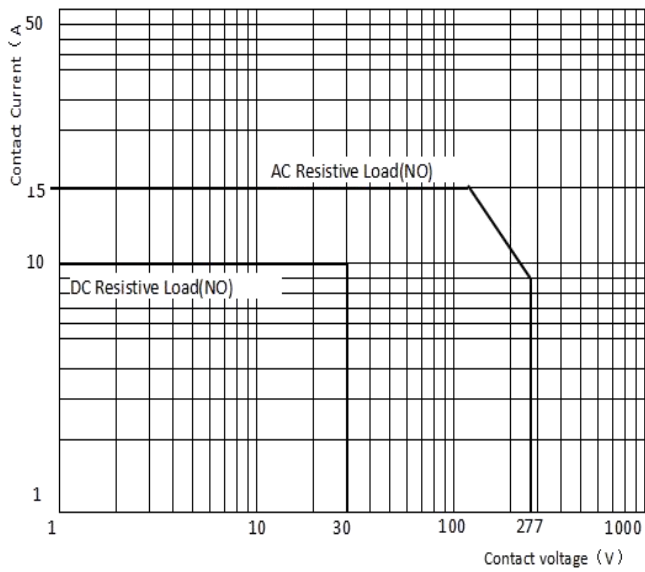
(2) The tolerance without indicating for PCB layout is always ± 0.1 mm.

■ SAFETY APPROVAL RATINGS

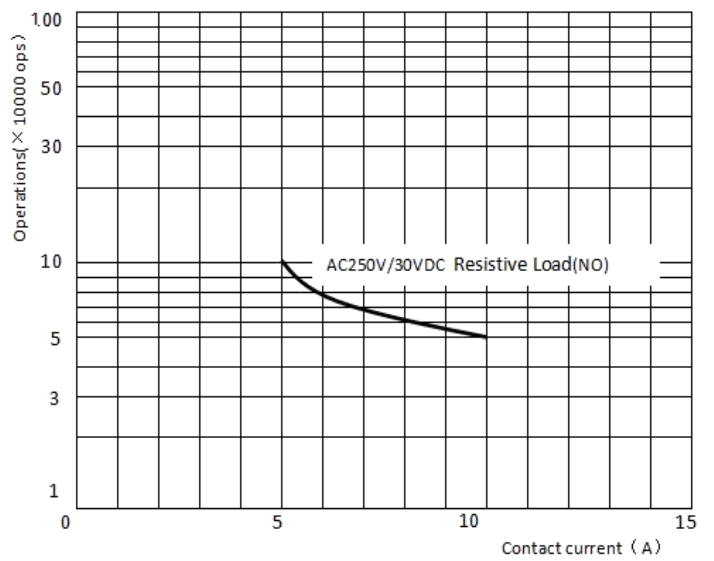
Approval	File No.	Contact arrangement	Contact arrangement	Approved ratings		
UL/C-UL	E475405	1A, 1C(NO)	AgSnO ₂	10A/5A	250/125VAC/30VDC	85°C
				TV-5	250/125VAC	85°C
				600W	120VAC(LED lamp)	85°C
		1/2HP		125VAC	85°C	
		10A		250/125VAC	105°C	
		15A		125VAC	105°C	
TUV	R 50323750	1B, 1C(NC)	AgSnO ₂	5A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

■ 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.