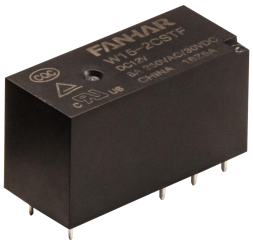
W15-2 Power Relay

Features

- 2 sets of 12A switching capability
- Breakdown voltage（between contact groups and contacts）:2.5KV
- Breakdown voltage（between coil and contacts）:5KV
- Creep age distance and air distance ≥15mm
- Products with operating temperature of 105℃ are available
- UL insulation system：Class F
- Environment-friendly product（RoHS compliant）
- Outline Dimensions：（28.8×12.5×15.8）mm
- Main application：Home appliance、Industrial Control



■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		2A、2B、2C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		AgNi、$AgSnO_2$
Rated value	Rated load(Resistance load)		8A 250VAC/30VDC
	Max.switching voltage		277VAC/30VDC
	Max.switching current		12A
	Max.switching capacity		2000VA/240W
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	1000VAC,1 min
		Between contact sets	2500VAC,1 min
		Between coil&contacts	4000VAC,1 min
	Operate time		≤15ms
	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		1×10^7ops
	Electrical		8A 250VAC/30VDC 5×10^4ops (ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃～85℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx.12g
Unit weight			Plastic sealed、Flux proofed

■ COIL DATA(23℃)

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	133.3mA	22.5Ω	400mW	DC 3.9V
DC 5V	≤3.75	≥0.25	80mA	62.6Ω		DC 6.5V
DC 6V	≤4.50	≥0.30	66.7mA	90Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	44.4mA	202.5Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	33.3mA	360Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	26.7mA	562.5Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	22.2mA	810Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	16.7mA	1440Ω		DC 31.2V
DC 48V	≤36.00	≥2.40	8.3mA	5760Ω		DC 62.4V
DC 60V	≤45	≥3	6.67mA	9000Ω		DC 78V
DC 90V	≤67.5	≥4.5	4.44mA	20250Ω		DC 117V
DC 110V	≤82.5	≥5.5	3.64mA	30250Ω		DC 143V

■ ORDERING INFORMATION

W15 -2A S T -XXX DC12V

① Type

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

③ Construction(1)：Nil=Flux proofed，S=Plastic sealed

④ Contact material(2)：Nil=AgNi、T=$AgSnO_2$

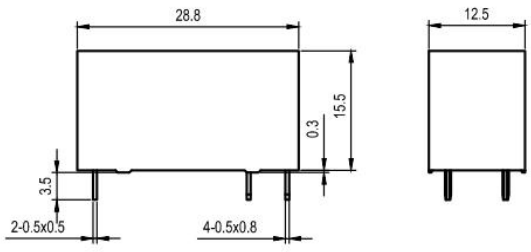
⑤ Customer special code：numbers or letters denote customer's requirements

⑥ Coil specification：DC3/5/6/9/12/15/18/24/48/60/90/110V

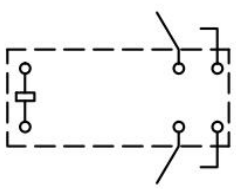
(1) When used in clean environment(excluding H2S、SO2、NO2、dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H2S、SO2、NO2、dust and other pollutants), it is recommended to choose the Plastic sealed.

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

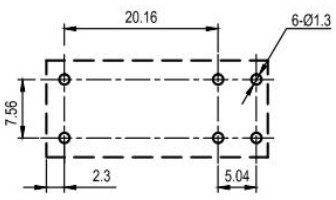
2A Outline Dimensions



Wiring Diagram (Bottom view)

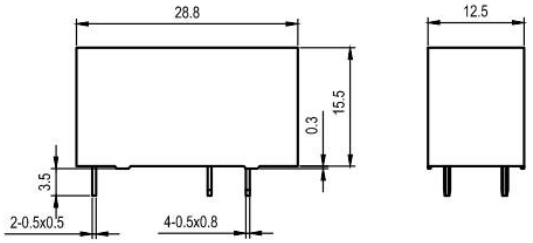


PCB Layout (Bottom view)

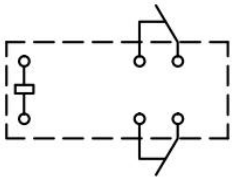


■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit：mm)

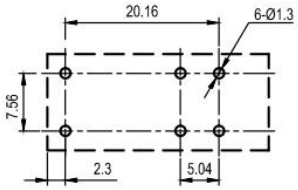
2B Outline Dimensions



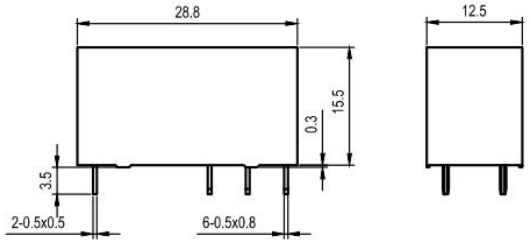
Wiring Diagram (Bottom view)



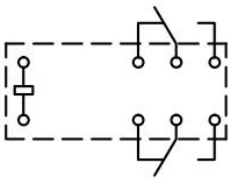
PCB Layout (Bottom view)



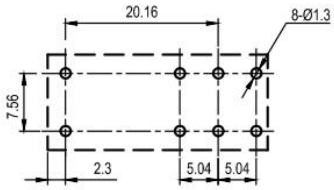
2C Outline Dimensions



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.

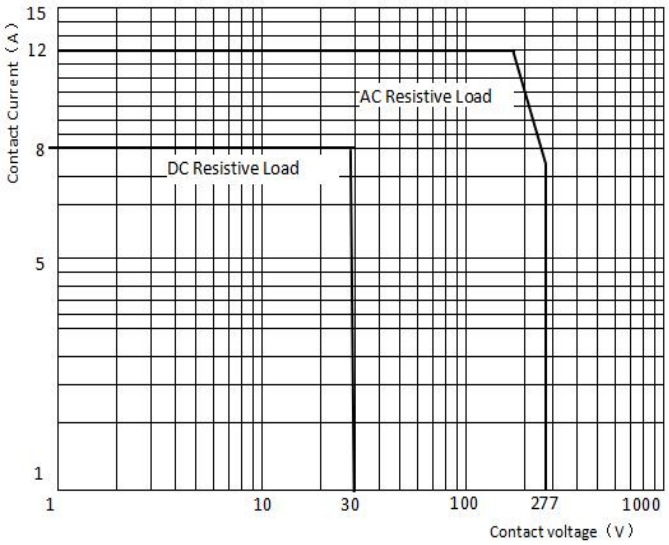
(2) The tolerance without indicating for PCB layout is always ±0.1mm.

■ SAFETY APPROVAL RATINGS

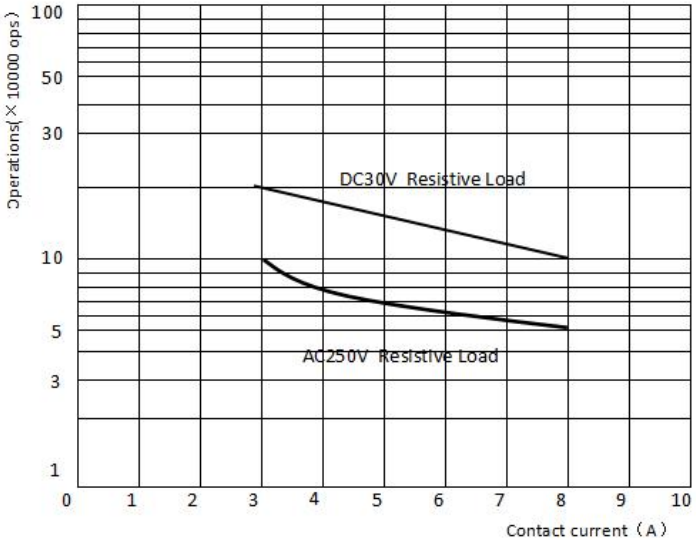
Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	2A、2C(NO)	AgNi、$AgSnO_2$	8A	250VAC/30VDC	85℃
				1/4HP	250VAC	85℃
				3A	250VAC (PF=0.6)	85℃
				10A	125VAC	85℃
		2B、2C(NC)		8A	250VAC/30VDC	85℃
TUV	R 50332875	2A(NO)	AgNi、$AgSnO_2$	8A	250VAC/30VDC	85℃
				12A	250VAC	85℃
				8A	250VAC	105℃
		2B(NC)		8A	250VAC/30VDC	85℃
		2C(CO)		5A/5A	250VAC/30VDC	85℃
CQC	CQC15002137649	2A(NO) 2B(NC) 2C(CO)	AgNi、$AgSnO_2$	8A	250VAC/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.