

Features

- 12A switching capability
- Single coil and double coils are all available
- Small size, the height of the product is only 12mm
- UL insulation system:Class F
- Environmental friendly product(RoHS compliant)
- Outline Dimensions:(20.0×10.0×11.8)mm
- Main application:Home appliance, Smart home

**CHARACTERISTICS**

Specifications	Item	
Contact Data	Contact arrangement	1A
	Contact resistance	≤50mΩ(6VDC 1A)
	Contact material	AgSnO ₂
Rated value	Rated load(Resistance load)	10A 250VAC
	Max.switching voltage	277VAC
	Max.switching current	12A
	Max.switching capacity	3000VA
	Min.allowing load	5VDC 100mA
Electrical performance	Insulation resistance(initial)	1000MΩ(500VDC)
	Dielectric strength (initial))	1000VAC,1min
		Between coil&contacts
	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	
	8A 250VAC	
	10A 250VAC	
	12A 250VAC	
Operate condition	-40°C~85°C	
	5% to 85%	
Termination	PCB	
Unit weight	Approx.4.5g	
Construction	Plastic sealed, Flux proofed	

■ COIL DATA(23°C)

■ Single coil latching

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.40	≤2.40	100mA	30Ω	0.3W	DC 4.5V
DC 5V	≤3.75	≤3.75	60mA	83.3Ω		DC 7.5V
DC 9V	≤6.75	≤6.75	33.3mA	270Ω		DC 13.5V
DC 12V	≤9.00	≤9.00	25mA	480Ω		DC 18V
DC 24V	≤18.0	≤18.0	12.5mA	1920Ω		DC 36V

■ Double coils latching

Nominal Voltage	Set Voltage VDC	Reset Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.40	≤2.40	200/200mA	15/15Ω	0.6W	DC 4.5V
DC 5V	≤3.75	≤3.75	120/120mA	41.7/41.7Ω		DC 7.5V
DC 9V	≤6.75	≤6.75	66.6/66.6mA	135/135Ω		DC 13.5V
DC 12V	≤9.00	≤9.00	50/50mA	240/240Ω		DC 18V
DC 24V	≤18.0	≤18.0	25/25mA	960/960Ω		DC 36V

■ ORDERING INFORMATION

FH44LS

-1A

S

T

-L1

R

-XXX

DC12V

① Type

② Contact arrangement:1A=1open contacts

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

④ Contact material:T=AgSnO₂

⑤ Coil type:L1=Single coil latching, L2=Double coils latching

⑥ Operation polarity:Nil=standard polarity R=reversed polarity

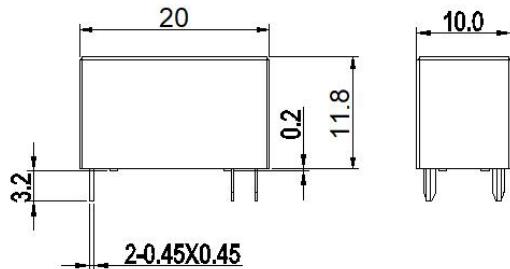
⑦ Customer special code:numbers or letters denote customer's requirements

⑧ Coil specification:DC5/6/9/12/24V

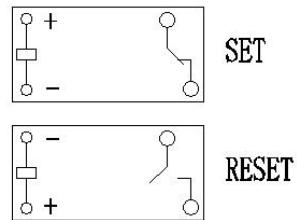
(1) When used in clean environment(excluding H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H₂S,SO₂,NO₂,dust and other pollutants), it is recommended to choose the Plastic sealed.

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

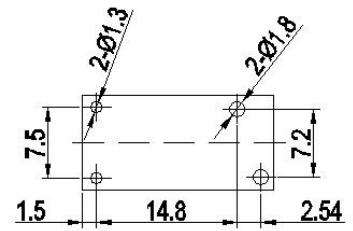
1A Outline Dimensions
(Single coil latching)



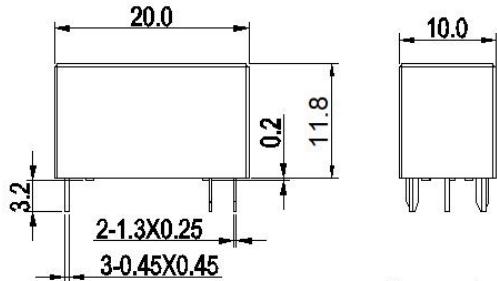
Wiring Diagram
(Bottom view)



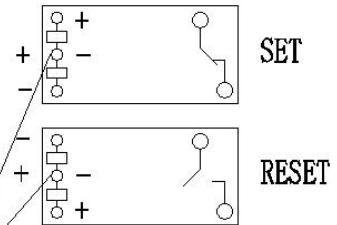
PCB Layout
(Bottom view)



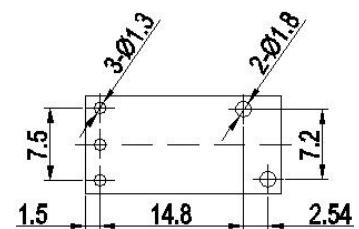
1A Outline Dimensions
(Double coils latching)



Wiring Diagram
(Bottom view)



PCB Layout
(Bottom view)



The common terminal, positive and negative poles are optional

Remark: (1) In case of no tolerance shown in outline dimension: outline dimension \leq 1mm, 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.

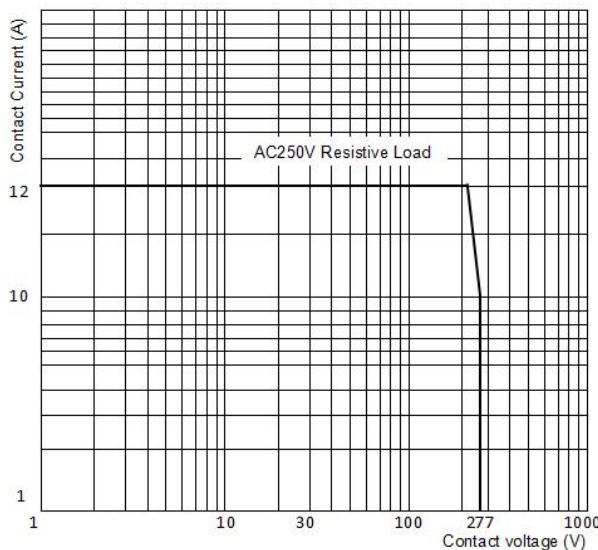
(2) The tolerance without indicating for PCB layout is always ± 0.1 mm.

■ SAFETY APPROVAL RATINGS

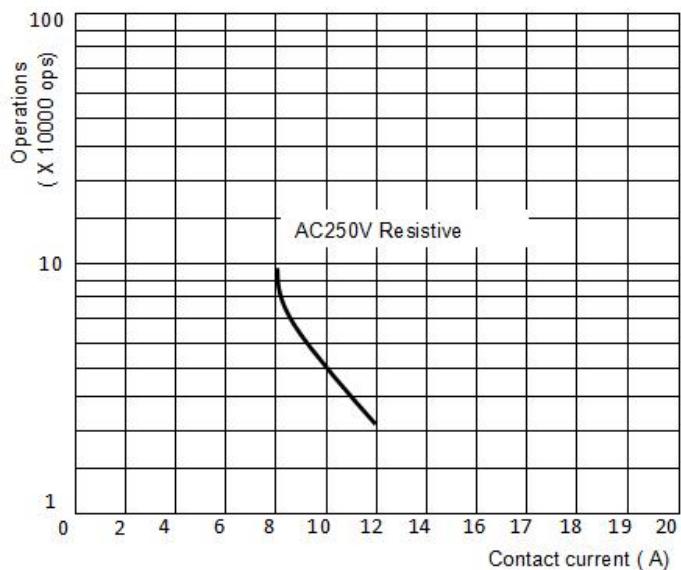
Approval	File No.	Contact arrangement	Contact material	Approved ratings		
UL/C-UL	E475405	1A	AgSnO ₂	Standard 10A 277/250VAC 16A 277/250VAC TV-5 125VAC	5×104(ON/OFF=1s/9s) 2×104(ON/OFF=1s/9s) 2.5×104(ON/OFF=1s/9s)	85°C 85°C 85°C
TUV	R50654293	1A	AgSnO ₂	Standard 10A 277/250VAC 16A 277/250VAC	5×104(ON/OFF=1s/9s) 2×104(ON/OFF=1s/9s)	85°C 85°C
CQC	CQC24002455512	1A	AgSnO ₂	Standard 10A 277/250VAC 16A 277/250VAC	5×104(ON/OFF=1s/9s) 2×104(ON/OFF=1s/9s)	85°C 85°C

■ PERFORMANCE CURVES

MAXIMUM SWITCHING POWER



ENDURANCE CURVE



■ 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 ≥ 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.