FH28 Power Relay

Features

- 20A 14VDC switching capability
- Contact arrangement:1A、1C
- Standard PCB terminal
- Plastic sealed,Flux proofed
- Small size,light weight
- UL insulation system:Class F
- Environment-friendly product(RoHS compliant)
- Outline Dimensions:(15.5×12.0×13.7)mm
- Main application:Automobile door lock、Automatic doors and Windows、Turn light

■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A、1C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		$AgSnO_2$
Rated value	Rated load(Resistance load)		20A 14VDC 5A 250VAC
	Max.switching voltage		250VAC/16VDC
	Max.switching current		20A
	Max.switching capacity		1250VA/280W
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	750VAC,1min
		Between coil&contacts	750VAC,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)		20A 14VDC 1×10^5ops (ON/OFF=1s/9s) 5A 250VAC 1×10^5ops (ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx.6g
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 5V	≤3.75	≥0.25	120mA	41.7Ω	600mW	DC 6.5V
DC 6V	≤4.50	≥0.30	100mA	60Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	66.7mA	135Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	50mA	240Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	40mA	375Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	33.3mA	540Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	25mA	960Ω		DC 31.2V

■ Sensitive Type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 3V	≤2.40	≥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

■ ORDERING INFORMATION

FH28	-1A	S	T	L	-XXX	DC5V

① Type

② Contact arrangement:1A=1open contacts、
1C=1 switched contacts

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

④ Contact material:T=$AgSnO_2$

⑤ Coil power:Nil=Standard、L=Sensitive(type A only)

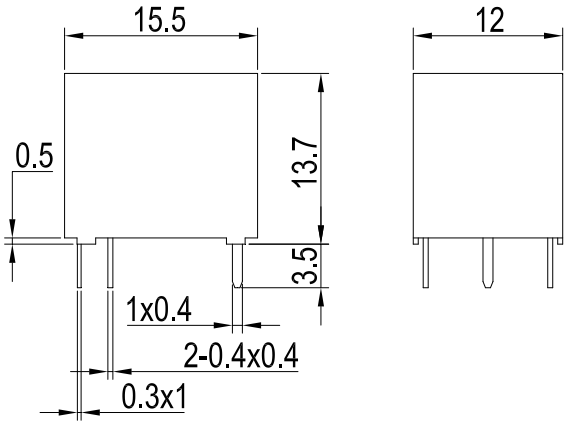
⑥ Customer special code:numbers or letters denote customer's requirements

⑦ Coil specification:DC3/5/6/9/12/15/18/24V

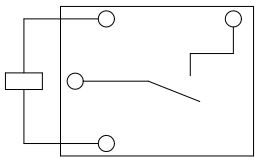
(1) When used in clean environment(excluding H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Plastic sealed.

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

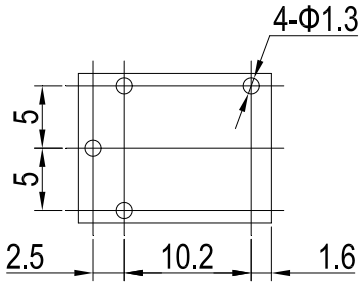
1A Outline Dimensions



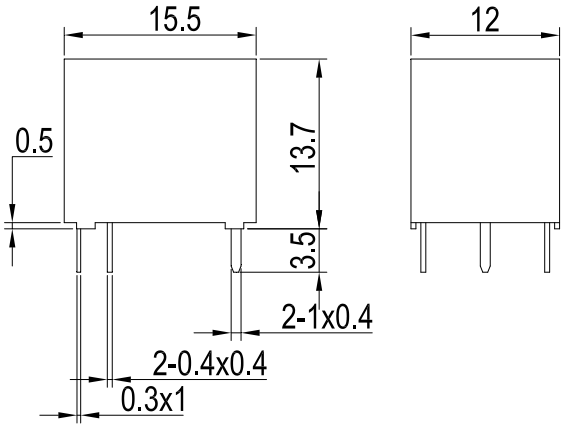
Wiring Diagram (Bottom view)



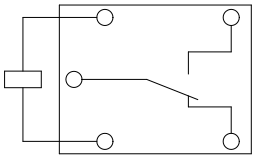
PCB Layout (Bottom view)



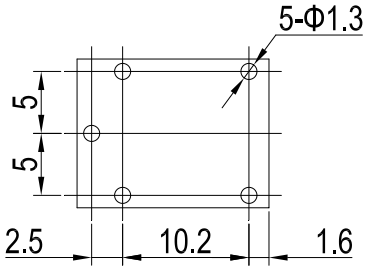
1C Outline Dimensions



Wiring Diagram (Bottom view)



PCB Layout (Bottom view)

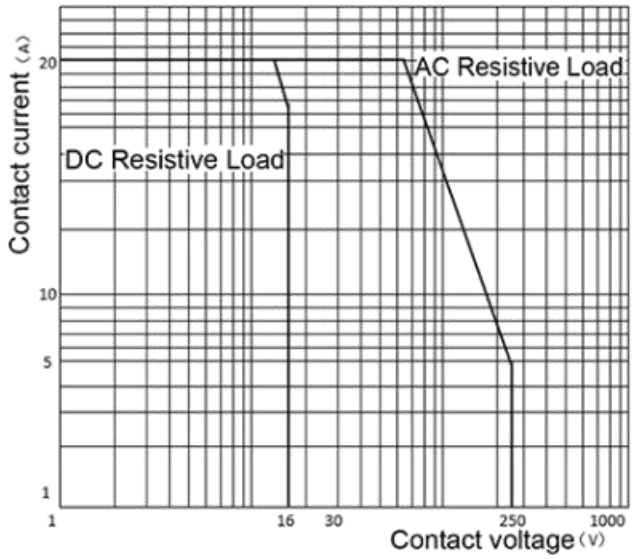


Remark: (1) In case of no tolerance shown in outline dimension:outline dimension≤1mm,tolerance should be±0.2mm;outline dimension >1mm and <5mm,tolerance should be ±0.3mm;outline dimension≥5mm,tolerance should be ±0.5mm.

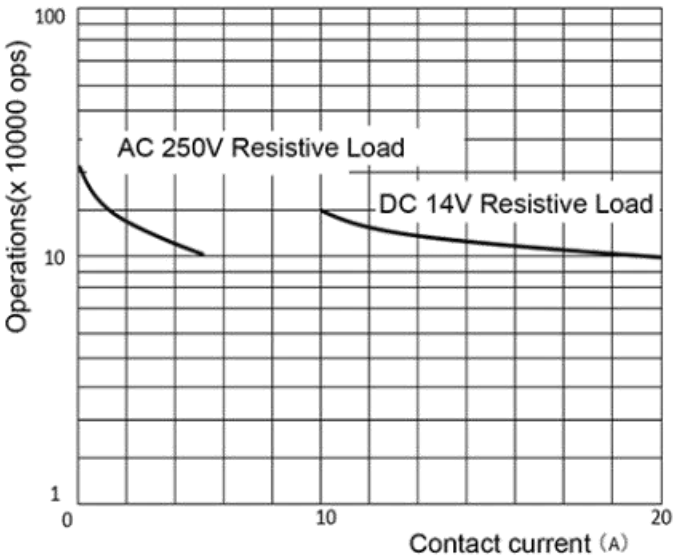
(2) The tolerance without indicating for PCB layout is always ±0.1mm.

■ 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.