

Features

- 125A switching capability
- Optional contact gap \geq 2.5mm
- Only pulse excitation voltage work, energy saving and environmental protection
- Green product (RoHS compliant)
- Outline dimension:: (40×22×30) mm
- Main application: Electronic control systems for telecommunication, construction machinery, trams, automobiles, trains, ships, etc



■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A
	Contact resistance(initial)		≤1mΩ(6VDC 20A)
	Contact material		AgSnO ₂
Rated value	Rated load(Resistance load)		125A 80VDC 125A 305VAC
	Max.switching voltage		80VDC/305VAC
	Max.switching current		125A
	Max.switching capacity		10000W/38125VA
	Min.allowing load		5VDC 100mA
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	Between main touchpoints: 2000VAC,1min
		Between coil&contacts	Between the main touchpoint coils: 4000VAC,1min
	Operate time		≤20ms (At rated voltage)
	Release time		≤20ms (At rated voltage)
	Mechanical performance	Shock resistance	
Vibration resistance		980m/s ² (100g)	
Endurance	Mechanical		1×10 ⁵ ops
	Electrical (room temperature)		125A 80VDC 6×10 ³ ops(ON/OFF=1s/9s) 125A 305VAC 6×10 ³ ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃～85℃
	Humidity		5% to 85%
Termination			PCB
Unit weight			Approx. 80g
Construction			Flux proofed

■ COIL DATA(23℃)

■Single coil latching

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current(±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 12V	≤8.4	≤8.4	666.7mA	18Ω	8W	DC 15.6V
DC 24V	≤16.8	≤16.8	333.3mA	72Ω		DC 31.2V
DC 48V	≤33.6	≤33.6	166.7mA	288Ω		DC 62.4V
DC 60V	≤42	≤42	133.3mA	450Ω		DC 78.0V

■Double coils latching

Nominal Voltage	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 12V	≤8.4	≤8.4	1333.3/133.3mA	9/9Ω	16W	DC 15.6V
DC 24V	≤16.8	≤16.8	666.6/666.6mA	36/36Ω		DC 31.2V
DC 48V	≤33.6	≤33.6	333.3/333.3mA	144/144Ω		DC 62.4V
DC 60V	≤42	≤42	266.6/266.6mA	225/255Ω		DC 78.0V

Note: In order to ensure the reliable operation of the relay, 100% ~ 130% rated voltage is first applied to the coil during excitation, the duration is 200±50ms, and then the voltage can be removed, and the relay completes the switch

■ ORDERING INFORMATION

FH56LG

-1A

T

F

A

-L1

R

-AC

DC12V

① Type:

② Contact arrangement: 1A=1 open contacts

③ Contact material: T=AgSnO₂

④ Insulation system: F=F class

⑤ Arc extinguishing system: A = with magnetic blowing arc extinguishing, B = without magnetic blowing arc extinguishing

⑥ Coil type: L1= single coil, L2= double coils

⑦ Action polarity: None = standard polarity, R= reverse polarity

⑧ Auxiliary contact: None = no auxiliary contact, AC = with auxiliary contact

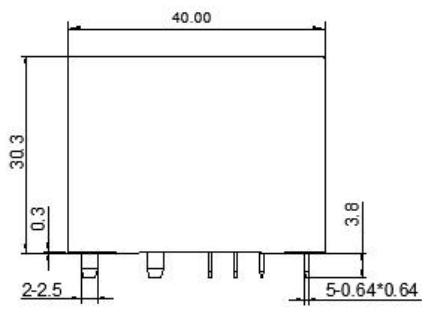
⑨ Coil specification: DC12/24/48/60V

- (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.
- (2) The auxiliary contacts and the main contacts are of the same form.

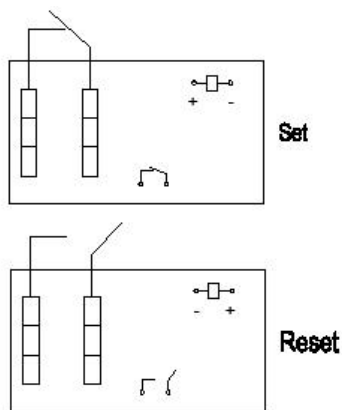
■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit: mm)

1A single coil latching (standard polarity)

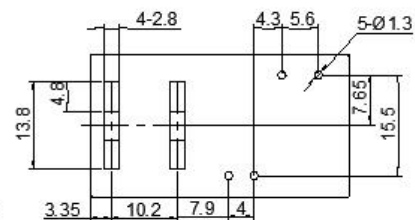
Outline Dimensions



Wiring Diagram
(Bottom view)

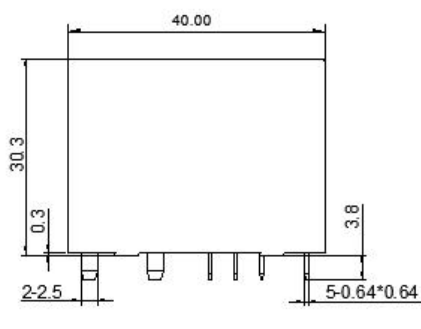


PCB Layout
(Bottom view)

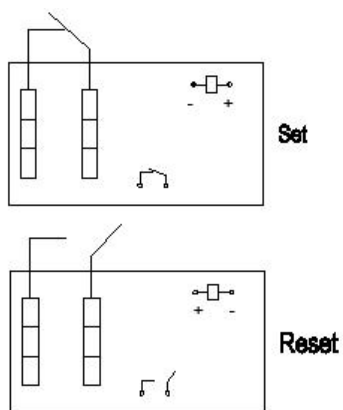


1A single coil latching (reverse polarity)

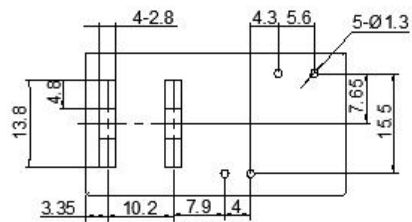
Outline Dimensions



Wiring Diagram
(Bottom view)

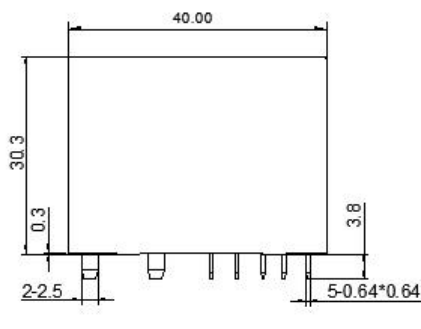


PCB Layout
(Bottom view)

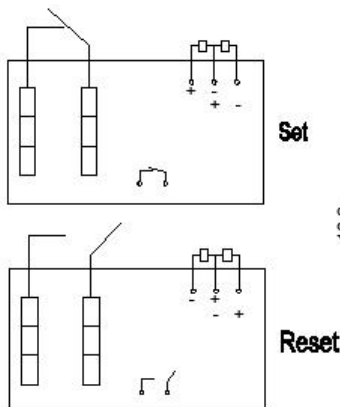


1A double coils latching (standard polarity)

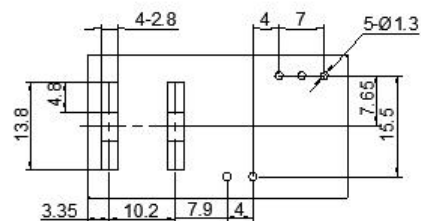
Outline Dimensions



Wiring Diagram
(Bottom view)



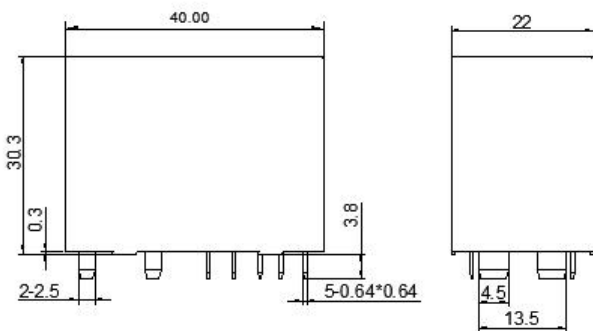
PCB Layout
(Bottom view)



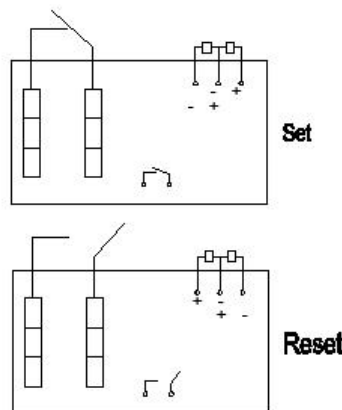
■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A double coils latching (reverse polarity)

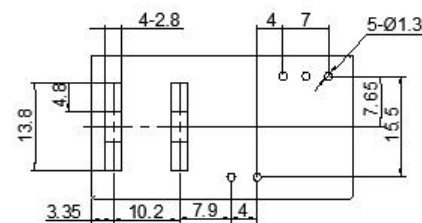
Outline Dimensions



Wiring Diagram (Bottom view)

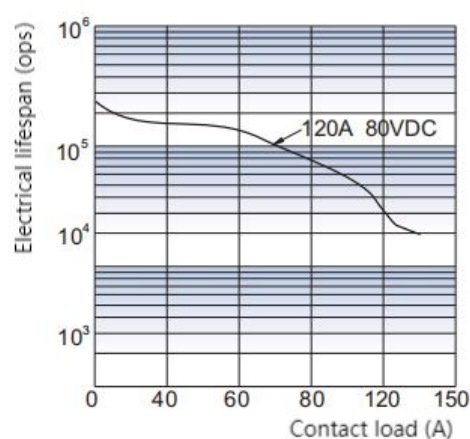
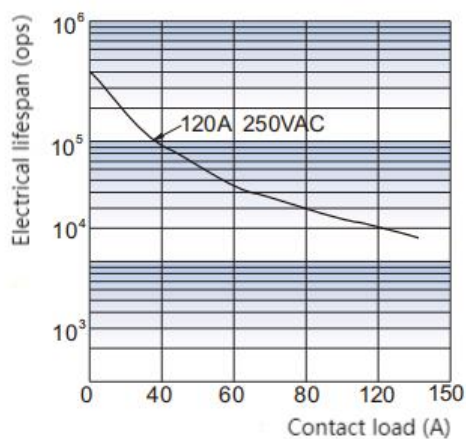


PCB Layout (Bottom view)



- Notes:(1) In case of no tolerance shown in outline dimension:outline dimension \leq 1mm,tolerance should be \pm 0.2mm;outline dimension $>$ 1mm and $<$ 5mm,tolerance should be \pm 0.3mm;outline dimension \geq 5mm, tolerance should be \pm 0.5mm.
- (2) The tolerance without indicating for PCB layout is always \pm 0.1mm.

■ PERFORMANCE CURVES



■ NOTICE

- 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 \geq 5 times operation time.
- In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;
- 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.
- The specification is for reference only.Specifications subject to change without notice.