FH53 Power Relay

Features

- 6A switching capability
- Ultra-thin (only 5 mm wide)
- Breakdown voltage (between coil and contacts): 4kV
- Surge voltage resistance between the coil and the contact:6kV
- High sensitivity type, with a power consumption of approximately 0.17W
- Outline Dimensions:(28x5x15）mm

■ CHARACTERISTICS

Specifications	Item		
Contact Data	Contact arrangement		1A、1C
	Contact resistance(initial)		≤100mΩ(6VDC 1A)
	Contact material		$AgSnO_2$、AgNi
Rated value	Rated load(Resistance load)		6A 250VAC/30VDC
	Max.switching voltage		400VAC/300VDC
	Max.switching current		6A
	Max.switching capacity		1500VA/180W
	Min.allowing load		5VDC 100mA(Non-gold-plated contacts)； 5VDC 10mA(Gold-plated contacts)
Electrical performance	Insulation resistance(initial)		1000MΩ(500VDC)
	Dielectric strength (initial)	Between open contacts	1000VAC,1min
		Between coil&contacts	4000VAC,1min
	Operate time		≤8ms
	Release time		≤4ms
Mechanical performance	Shock resistance	Functional	49m/s^2
		Destructive	980m/s^2
	Vibration resistance		10Hz~55Hz 1mm DA
Endurance	Mechanical		1×10^{7}ops
	Electrical(Room temperature)		1A:6A 250VAC/30VDC 6×10^{4}ops(ON/OFF=1s/9s) 1C:NO：6A 250VAC/30VDC 3×10^{4}ops(ON/OFF=1s/9s) NC：6A 250VAC/30VDC 1×10^{4}ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~85℃
	Humidity		5% to 90%
Termination			PCB
Unit weight			Approx.5g
Construction			Plastic sealed，Flux proofed

COIL DATA(23℃)

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 5V	≤3.75	≥0.25	34mA	147Ω	170mW	DC 5.5V
DC 6V	≤4.50	≥0.3	28mA	212Ω		DC 6.6V
DC 9V	≤6.75	≥0.45	19mA	476Ω		DC 9.9V
DC 12V	≤9.0	≥0.60	14mA	848Ω		DC 13.2V
DC 24V	≤18	≥1.2	7mA	3390Ω		DC 26.4V
DC 48V	≤36	≥2.4	5mA	10600Ω	210mW	DC 52.8V
DC 60V	≤45	≥3.0	4mA	16600Ω		DC 66V

ORDERING INFORMATION

FH53	-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=$AgSnO_2$、Nil=AgNi、

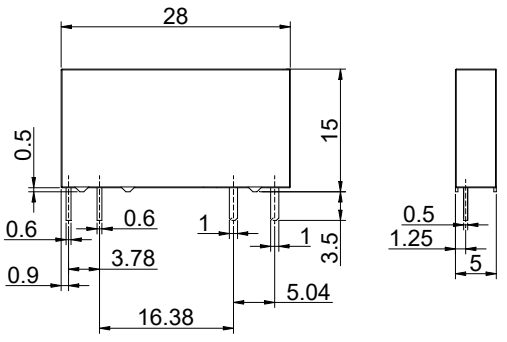
⑤ Customer special code:numbers or letters denote customer's requirements：
G= Gold plated contacts，F=Folding installation

⑥ Coil specification:DC/5/6/9/12/24/48/60V

(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.

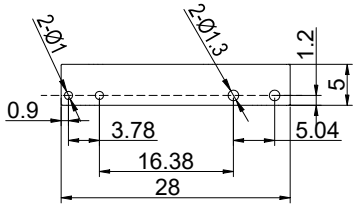
■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

1A Outline Dimensions



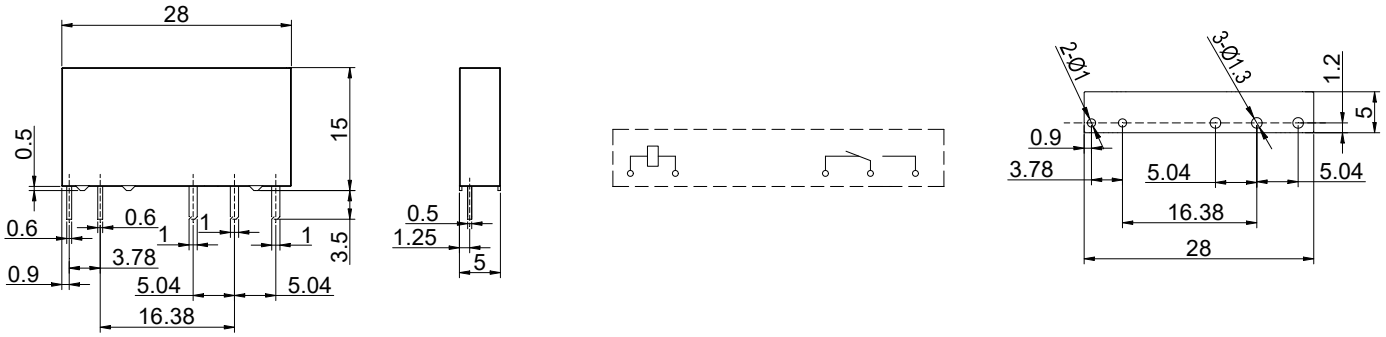
Wiring Diagram (Bottom view)

PCB Layout (Bottom view)

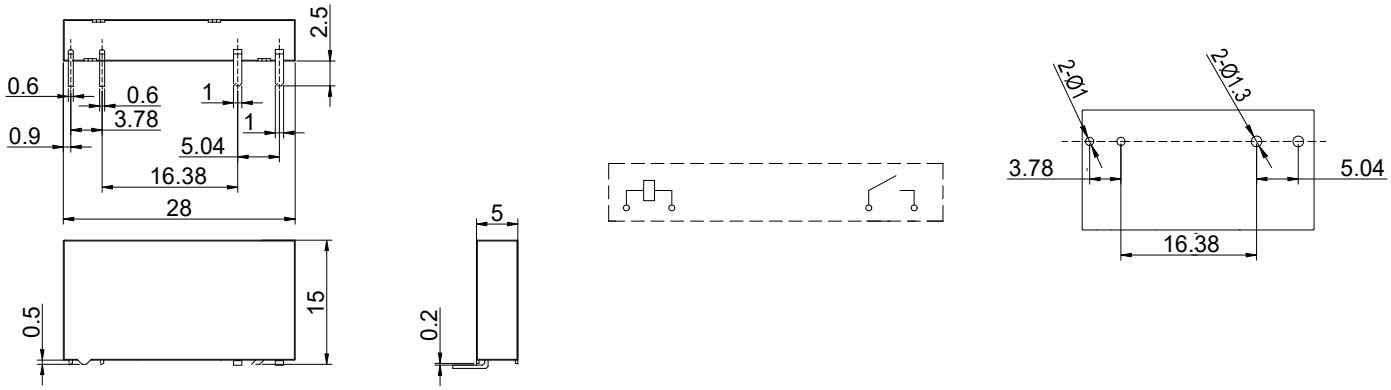


■OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

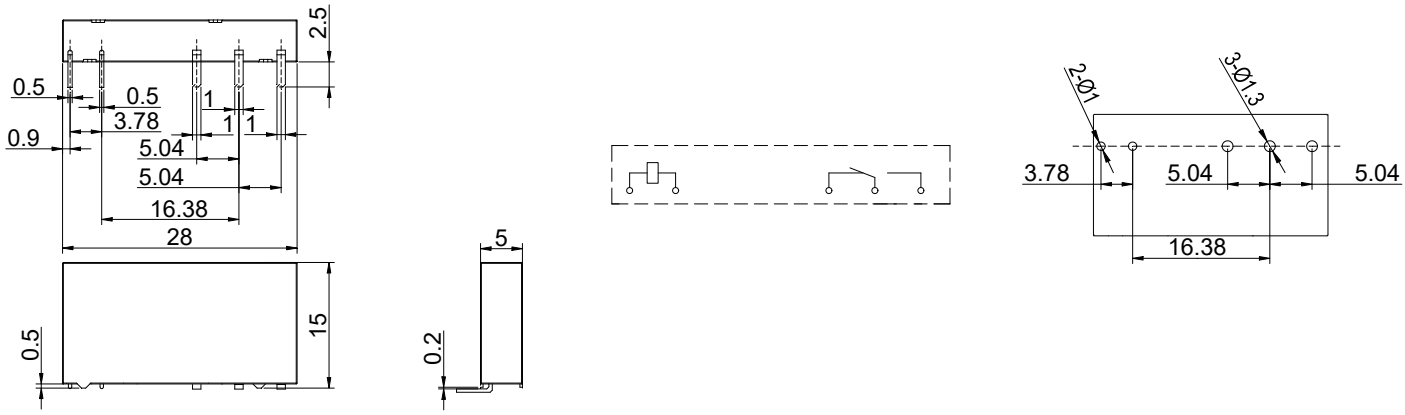
1C Outline Dimensions | Wiring Diagram (Bottom view) | PCB Layout (Bottom view)



1A-F Outline Dimensions | Wiring Diagram (Bottom view) | PCB Layout (Bottom view)



1C-F Outline Dimensions | Wiring Diagram (Bottom view) | PCB Layout (Bottom view)



Remark:⑴In 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.

⑵ The tolerance without indicating for PCB layout is always ±0.1mm.

NOTICE

① In order to maintain the initial performance parameters of the relay, please be careful not to drop the product;

◡ The specification is for reference only.Specifications subject to change without notice.