FH14T-E/FH14HV-E

Power Relay

Features

- 32A switching capability
- Products with operating temperature of 105℃ are available
- UL insulation system:Class F
- Ultra - small type,standard PCB terminals.
- Outline Dimensions:(21.5*16.0*20.6)mm

CHARACTERISTICS

Specifications	Item		FH14T-E	FH14HV-E
Contact Data	Contact arrangement		1A	
	Contact resistance		≤10mΩ(6VDC 20A)	
	Contact material		$AgSnO_2$	
Rated load	Rated load(Resistance load)		Standard type:32A 250VAC	
			Sensitive type:26A 250VAC	
	Max.switching voltage		600VAC	
	Max.switching current		Standard type: 32A	
			Sensitive type: 26A	
	Max.switching capacity		8864VA	
			7202VA	
	Min.allowing load		5VDC 100mA	
Electrical performance	Insulation resistance(initial)		100MΩ(500VDC)	
	Dielectric strength (initial)	Between open contacts	Standard type:1500VAC,1min	
			BG type 2000VAC,1min	
		Between coil&contacts	2500VAC,1min	4000VAC,1min
	Operate time		≤15ms	
	Release 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		1×10^{5}ops	
	Electrical(Room temperature)		Standard type:32A 250VAC	1×10^{4}ops(ON/OFF=1s/9s)
			Sensitive type:26A 250VAC	3×10^{4}ops(ON/OFF=1s/9s)
Operate condition	Ambient temperature		-40℃~105℃	
	Humidity		5% to 85%	
Termination			PCB	
Unit weight			Approx.16g	
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	≤4	≥0.25	561mA	8.9Ω	2800mW	DC 5.5V
DC 12V	≤9.6	≥0.6	235mA	51Ω		DC 13.2V
DC 24V	≤19.2	≥0.12	116mA	206Ω		DC 26.4V
DC 48V	≤38.4	≥0.24	58mA	823Ω		DC 52.8V

Note: Holding voltage: 32% - 36%Un (ambient temperature 105℃)

■Sensitive type

Nominal Voltage	Operate Voltage VDC	Release Voltage VDC	Rated Current (±10%)	Coil Resistance (±10%)	Nominal Power	Max Voltage
DC 5V	≤4	≥0.25	333mA	15Ω	1667mW	DC 5.5V
DC 12V	≤9.6	≥0.6	139mA	86Ω		DC 13.2V
DC 24V	≤19.2	≥0.12	69mA	345Ω		DC 26.4V
DC 48V	≤38.4	≥0.24	34mA	1380Ω		DC 52.8V

Note: Holding voltage: 50% to 55%Un (ambient temperature 85℃)

ORDERING INFORMATION

FH14HV-E FH14T-E	-BG	-1A	1	S	T	L	-XXX	DC12V

① Model :FH14HV-E/FH14T-E

② Contact clearance: None = Standard clearance (1.8mm)
BG= Large clearance (2.4mm)

③ Contact form :1A=1open contacts

④Installation pin positions :1=1 type pin position (single-pin led out) 2=2 type pin position (double-pin led out, sensitive type only)

⑤ Construction(1):Nil=Flux proofed,S=Plastic sealed

⑥ Contact material :T=AgSnO2

⑦ Coil power consumption: None = standard type L= Sensitive type

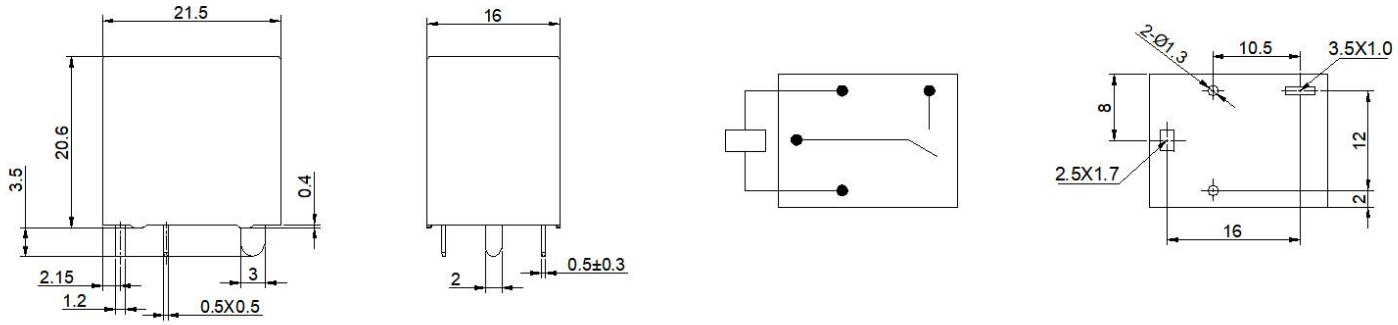
⑧ Customer special code:numbers or letters denote customer's requirements

⑨ Coil specification :DC/5/12/24/48V

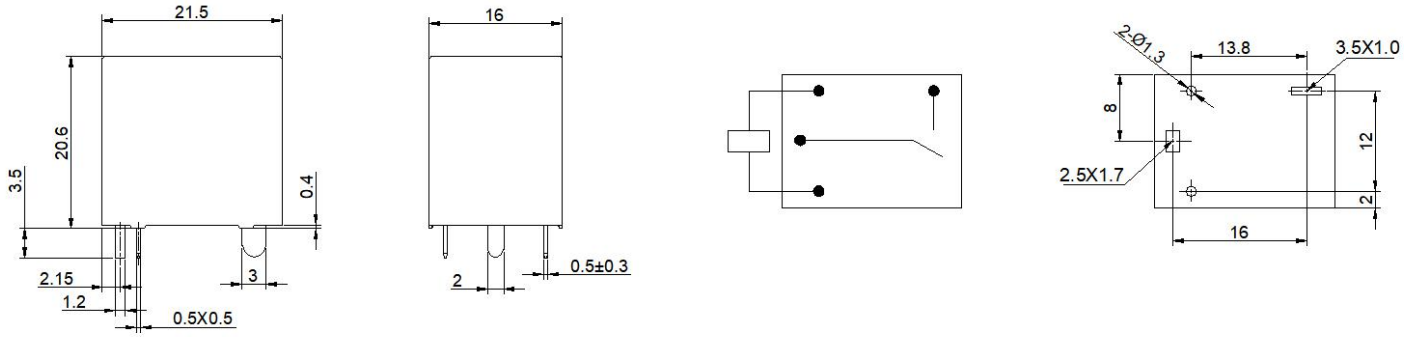
（1）When used in clean environment(excluding H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Flux proofed type;When used in unclean environment(contain H_2S,SO_2,NO_2,dust and other pollutants), it is recommended to choose the Plastic sealed.

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

FH14HV-E（Type 1）1A Outline Dimensions Wiring Diagram (Bottom view) PCB Layout (Bottom view)

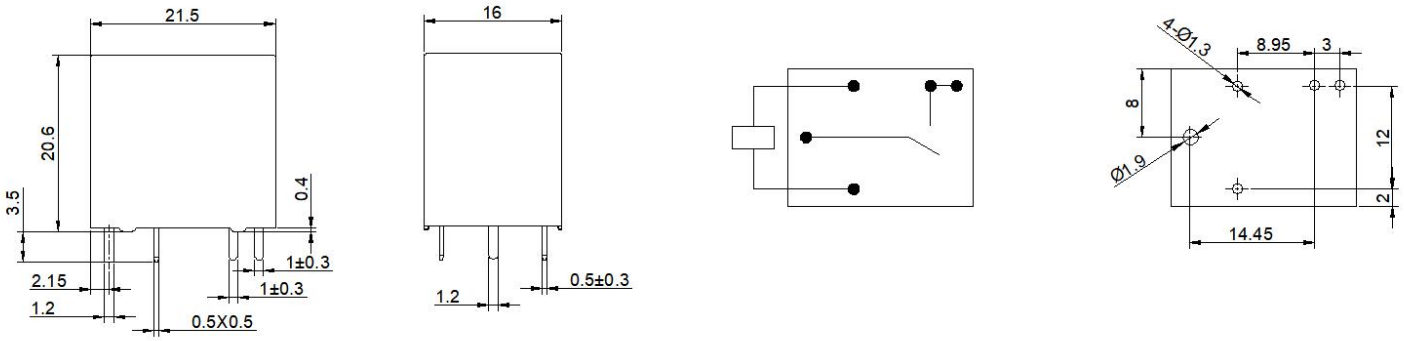


FH14T-E（Type 1）1A Outline Dimensions Wiring Diagram (Bottom view) PCB Layout (Bottom view)

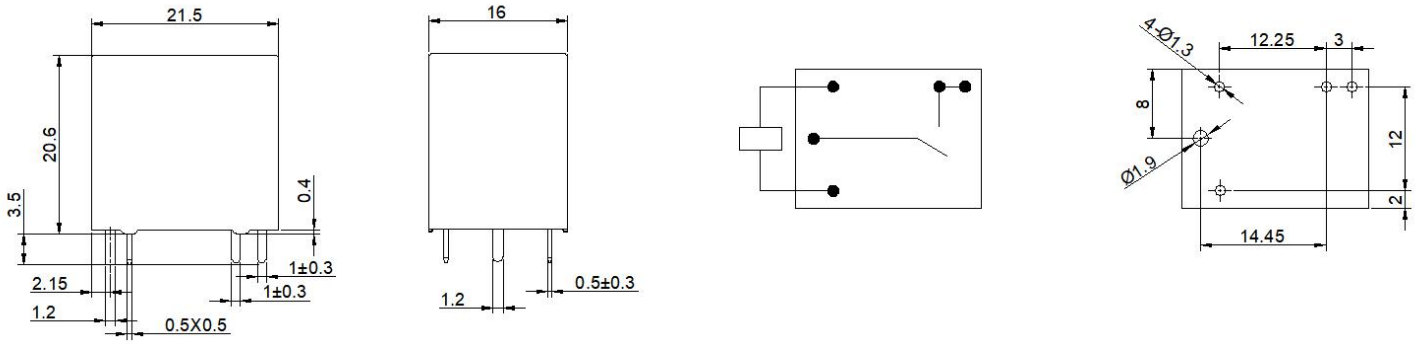


■ OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT(Unit:mm)

FH14HV-E（Type 2）1A Outline Dimensions Wiring Diagram (Bottom view) PCB Layout (Bottom view)



FH14T-E（Type 2）1A 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.

SAFETY APPROVAL RATINGS

Approval	File No.	Contact material	Approved ratings
UL/C-UL	Certification in progress	$AgSnO_2$	Standard type: NO: 32A 250VAC/277VAC 85/℃ 10k NO: 25A 250VAC/277VAC 85/105℃ 10k NO: Connect 16A, carry 32A, disconnect 16A 250VAC/600VAC 85/105℃ 10k Sensitive type: NO: 26A 277VAC/250VAC 85℃ 30k
TUV	Certification in progress	$AgSnO_2$	Standard type: NO: 32A 250VAC/277VAC 85/℃ 10k NO: 25A 250VAC/277VAC 85/105℃ 10k NO: Connect 16A, carry 32A, disconnect 16A 250VAC/600VAC 85/105℃ 10k Sensitive type: NO: 26A 277VAC/250VAC 85℃ 30k
CQC	Certification in progress	$AgSnO_2$	Standard type: NO: 32A 250VAC/277VAC 85/℃ 10k NO: 25A 250VAC/277VAC 85/105℃ 10k NO: Connect 16A, carry 32A, disconnect 16A 250VAC/600VAC 85/105℃ 10k Sensitive type: NO: 26A 277VAC/250VAC 85℃ 30k

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.