

HF49FD-AS

RELAY MODULE



File No.:
E253370(Socket)
E133481(Relay)



File No.:
40033644(Relay)



File No.:
R50149334(Relay)



File No.:
CQC17002175722(Relay)



Features

- 3000VAC insulation, 1000MΩ insulation resistance
- PCB Installation method
- Meeting reinforce insulation of IEC61131-2
- Creepage distance and air distance is bigger than 3.5mm
- Extremely small, High sensitivity, Power consumption only 0.12W
- UL insulation system: Class F available
- Please choose (009) relay product

RoHS compliant

CONTACT DATA

Contact arrangement	1A
Contact rating (Res. load)	5A 250VAC/30VDC
Max. switching voltage	250VAC/30VDC
Max. switching current	5A

CHARACTERISTICS

Insulation resistance		1000MΩ (500VAC)
Dielectric strength(RMS)	Between coil & contacts	3000VAC 1min
	Between open contacts	1000VAC 1min
Surge Voltage(between coil and mov. contact)		6kV(1.2/50μs)
Operate time (at nomi. volt.)		10ms max.
Release time (at nomi. volt.)		5ms max.
Humidity (RH)		5% to 85%RH
Ambient temperature		-40℃ to 70℃

COIL DATA

23°C

Nominal Voltage VAC	Pick-up Voltage VAC max.	Drop-out Voltage VAC min	Max. Allowable Voltage VAC
5	3.50	0.25	6.0
6	4.20	0.30	7.2
9	6.30	0.45	10.8
12	8.40	0.60	14.4
18	12.6	0.90	21.6
24(3)	16.8	1.20	28.8

Notes: (1) The data shown above are initial values;
(2) Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time;
(3) 24VDC, 120mW specification have available, Please refer to the "ORDERING INFORMATION" for more details;
(4) All above data are tested when the relay terminals are in downward position. When the terminals are in other positions, the pick-up and drop-out voltage will have ±5% tolerance. For example, when the terminals are in transverse position, the max. pick-up voltage is 75% of the nominal voltage.



HONGFA RELAY

ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000, ISO/IEC 27001 CERTIFIED

2024 Rev. 1.00

ORDERING INFORMATION

HF49FD-AS / <input type="checkbox"/> <input type="checkbox"/> -1H <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> -A1- <input type="checkbox"/> (009)	
Relay module	HF49FD: Relay AS: module
Coil voltage	Nil: DC
Relay coil voltage	5, 6, 9, 12, 18, 24VDC
Contact arrangement	1H: 1 Form A
Contact arrangement	1: single mov. contact 2: bifurcated contact (only for gold plated)
Pinning	1: 5.08mm 2: 7.62mm
Contact plating	Nil: No gold plated (only for single mov. contact) G: Gold plated
Contact material	T: AgSnO ₂ Nil: AgNi
Insulation standard	F: Class F B: Class B Nil: Class A
Coil Power	L: Sensitive type (Only for 24VDC) Nil: Standard type
Matching socket	5.08mm Pinning: A1-1 7.62mm Pinning: A1-2
Special code	009: Housing with protrusions and sockets

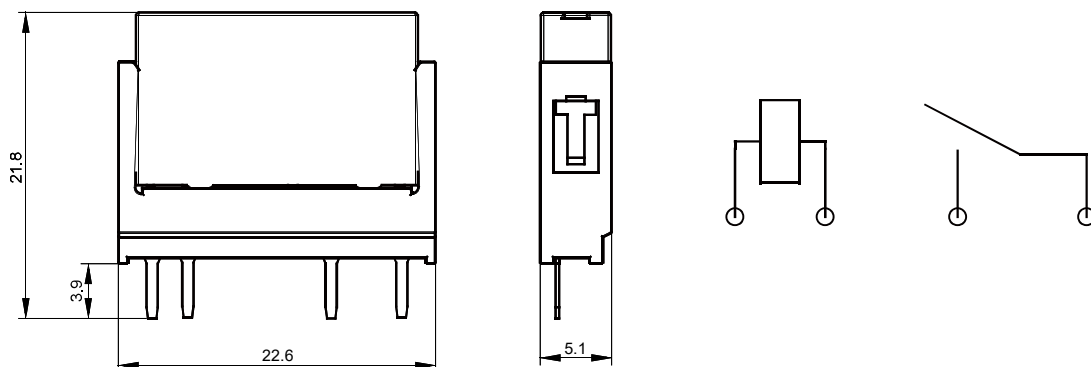
OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

Outline Dimensions

Wiring Diagram(Bottom view)

HF49FD-AS/☐☐☐☐-1H☐☐☐☐☐-A1-1 (009)



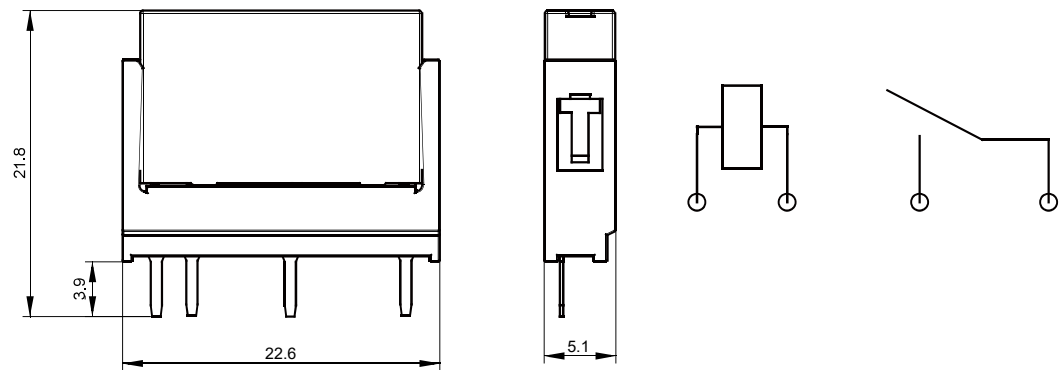
OUTLINE DIMENSIONS, WIRING DIAGRAM

Unit: mm

Outline Dimensions

Wiring Diagram(Top view)

HF49FD-AS/□□□-1H□□□□□-A1-2 (009)



COMPONENT ORDERING INFORMATION

PCB terminal

P/N	module type	relay type	socket type	retainer type
——	H49FD-AS/012-1H11F-A1-1 (009)	H49FD/012-1H11F (009)	49F-1Z-A1-1	——
——	H49FD-AS/024-1H11F-A1-1 (009)	H49FD/024-1H11F (009)		
——	H49FD-AS/012-1H12F-A1-2 (009)	H49FD/012-1H12F (009)	49F-1Z-A1-2	
——	H49FD-AS/024-1H12F-A1-2 (009)	H49FD/024-1H12F (009)		

Note: Please contact us for any information.

PRECAUTIONS FOR USE

For your personal safety and the normal operation of the equipment, as well as to prevent fire, please note the following issues :

- 1、The rated current of the socket should be no less than the rated current of the relay.
- 2、Sockets are required to be firmly fixed to prevent the wiring from loosening and affecting the quality of wiring.
- 3、Be sure to disconnect power to the outlet before installation, disassembly, wiring, maintenance and inspection.
- 4、Prevent foreign objects such as wire shavings from falling inside this product when wiring.
- 5、Be sure to install the relay in place, and use accessories such as retainer if necessary to improve contact reliability.
Do not use with incomplete connections.
- 6、Be sure to observe the relay ratings and do not overload the relay.
- 7、Before selecting a relay, make sure that the drive voltage matches the relay excitation voltage.
- 8、The main external dimension, when the external dimension > 50mm, the tolerance is $\pm 1\text{mm}$; When the $20\text{mm} < \text{dimensions}$ are between $50\text{mm} \leq$, the tolerance is $\pm 0.5\text{mm}$; When the overall dimension of $5\text{mm} < \text{between} \leq 20\text{mm}$, the tolerance is $\pm 0.4\text{mm}$, and when the external dimension is $\leq 5\text{mm}$, the tolerance is $\pm 0.3\text{mm}$.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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