HFD41/D41A

SUBMINIATURE SIGNAL RELAY

Plastic sealed and flux proofed types available

Environmental friendly product (RoHS compliant)

B type: Approx. 450mW;

N type: Approx. 360mW; H type: Approx. 200mW

700

2800

15.6

31.2

400

1600

at 23°C

20

56

80

180

320

1280

Outline Dimensions: (15.7 x 11.0 x 12.0) mm

UL insulation system: Class F available

Features

•

COIL

Coil power

12

24

9.0

18.0

 5A switching capability 1 Form C configuration

Standard PCB layout

c RU us

File No.: E133481

File No.: R50265409 (Only HFD41A)

(CQC)



File No.: CQC15002123047 (Only HFD41A)

CONTACT DATA

-
1C
100mΩ max. (at 1A 6VDC)
AgNi, AgCdO
1A 120VAC, 1A 240VAC / 30VDC
3A 120VAC
2A 120VAC, 5A 120VAC
240VAC / 30VDC
5A
600VA / 30W
1 x 10 ⁷ ops
9.9×10^4 ops (1A 120VAC, 1A 30VDC, Resistive load, Room temp., 1s on 9s off)

lqua0							
OVDC							
20VAC							
20VAC	COIL				-	а	t 23°
OVDC	Nominal	Pick-up Voltage	Drop-out Voltage	Max.		Resist	
5A	Voltage	VOltage	VDC	Voltage	X ((1±10%) \(2
/ 30W	VDC	max.	min.	VDC	Н	N	В
10 ⁷ 0PS	3	2.3	0.3	3.9	45	25	:
0VDC, 9s off)	5	3.8	0.5	6.5	120	70	
<u> </u>	6	4.5	0.6	7.8	180	100	ł
	9	6.8	0.9	11.7	400	220	18

	CHARACTERISTICS
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Insulation resistance			100MΩ (at 500VDC)
Dielectric	Between coil & contacts		1000VAC 1min
strength	Between	open contacts	500VAC 1min
Operate time (at nomi. volt.)			10ms max.
Release tin	ne (at nom	i. volt.)	5ms max.
		Functional	98m/s ²
Shock resistance		Destructive	980m/s ²
Vibration resistance			10Hz to 55Hz 1.5mm DA
Humidity			5% to 85% RH
Ambient temperature			-25°C to 70°C
Termination			PCB (DIP)
Unit weight			Approx. 5g
Construction			Plastic sealed, Flux proofed

SAFETY APPROVAL RATINGS

1.2

2.4

1A 120VAC, 1A 240VAC/30VDC
2A 120VAC, 3A 120VAC
5A 120VAC
1A 120VAC/30VDC

Notes: 1) All values unspecified are at room temperature. 2) Only typical loads are listed above. Other load specifications can be available upon request.

Notes: 1) The data shown above are initial values.

2) Please find coil temperature curve in the characteristic curves below.

3) UL insulation system: Class F, Class B.



HONGFA RELAY ISO9001, ISO/TS16949 , ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

ORDERING INFORMATION

	HFD41	/12VDC	-N	S	G	F	3	(XXX)
Туре	HFD41A							
Coil voltage 3, 5, 6,	9, 12, 24 VDC	_						
Coil power H: 200	mW N: 360mW	B: 450mW						
Construction ¹⁾²⁾	S: Plastic sealed	Nil: Flux proofee	b					
Contact plating G : Gold plated ³⁾ Nil : No gold plated								
Insulation standard	F: Class F	Nil: Class B						
Contact capacity ³) 3: 3A (AgCdO, riveted contact) 5: 5A (AgCdO, riveted contact) Nil: 1A, 2A (AgNi, threaded contact)								
Special code ⁴) XXX: Customer special requirement Nil: Standard								

Notes: 1) Under the ambience with dangerous gas like H2S, SO2 or NO2, plastic sealed type is recommended; Please test the relay in real applications. If the ambience allows, flux proofed type is preferentially recommended. 2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays

on PCB. 3) For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC. For 3A, 5A load products, only gold-plated

contact is available.

4) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions





Wiring Diagram (Bottom view)





(Bottom view)

PCB Layout (Bottom view)



OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension \leq 1mm, tolerance should be ±0.2mm; outline dimension >1mm and \leq 5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

- 2) The tolerance without indicating for PCB layout is always ±0.1mm.
- 3) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES



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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