

HFD41/D41A

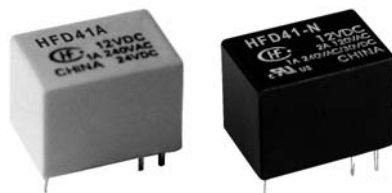
SUBMINIATURE SIGNAL RELAY

CULUS

File No.:E133481



File No.:CQC10002049171



Features

- 5A switching capability
- 1 Form C configuration
- Standard PCB layout
- Plastic sealed and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (15.7 x 11.0 x 12.0) mm

CONTACT DATA

Concat arrangement	1C
Contact resistance	100mΩ (at 1A 24VDC)
Contact material	AgNi
Contact rating (Res. load)	1A 125VAC/30VDC 1A 240VAC/30VDC 2A 125VAC, 3A 120VAC 5A 120VAC
Max. switching voltage	240VAC / 30VDC
Max. switching current	5A
Max. switching power	600VA / 30W
Mechanical endurance	1 x 10 ⁷ OPS
Electrical endurance	1 x 10 ⁵ OPS

CHARACTERISTICS

Insulation resistance		100MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	1000VAC 1min
	Between open contacts	500VAC 1min
Operate time (at nomi. volt.)		10ms max.
Release time (at nomi. volt.)		5ms max.
Shock resistance	Functional	98m/s²
	Destructive	980m/s²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		35% to 85% RH
Ambient temperature		-25°C to 70°C
Termination		PCB (DIP)
Unit weight		Approx. 5g
Construction		Plastic sealed, Flux proofed

Notes: 1) The data shown above are initial values.
2) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power B type: 450mW; N type: 360mW; H type: 200mW

COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance x (1±10%) Ω		
				H	N	B
3	2.3	0.3	3.9	45	25	20
5	3.8	0.5	6.5	120	70	56
6	4.5	0.6	7.8	180	100	80
9	6.8	0.9	11.7	400	220	180
12	9.0	1.2	15.6	700	400	320
24	18.0	2.4	31.2	2800	1600	1280

SAFETY APPROVAL RATINGS

UL/CUL	1A 125VAC/30VDC
	1A 240VAC/30VDC
	2A 125VAC
	3A 120VAC
	5A 120VAC

Notes: Only some typical ratings are listed above. If more details are required, please contact us.



HONGFA RELAY

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

2010 Rev. 1.01

ORDERING INFORMATION

Type		HFD41 HFD41A		-012	-N	G	S	F	3	(XXX)
Coil voltage		3, 5, 6, 9, 12, 24 VDC								
Coil power		H: 200mW		N: 360mW		B: 450mW				
Contact plating		G: Gold plated		Nil: No gold plated						
Construction ¹⁾		S: Plastic sealed		Nil: Flux proofed						
Insulation standard		F: Class F		Nil: Class B						
Contact material		3: 3A (AgCdO Gold-plated)			5: 5A (AgCdO Gold-plated)			Nil: Standard		
Customer special code										

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.

If water cleaning is required after the relay is assembled on PCB, please contact us for suggestion about suitable parts.

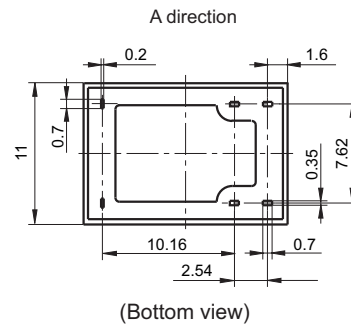
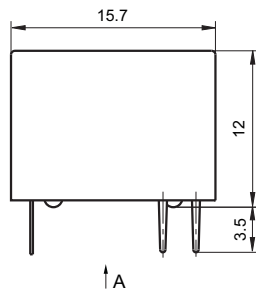
2) For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

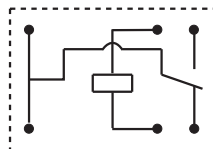
Unit: mm

Outline Dimensions

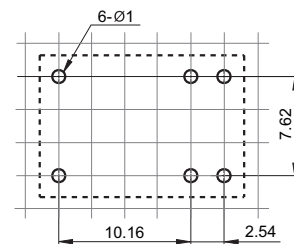
HFD41



Wiring Diagram (Bottom view)

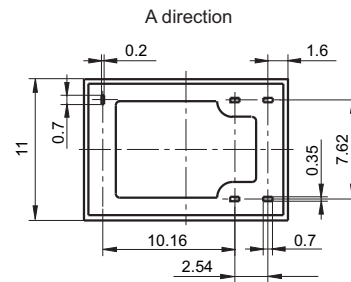


PCB Layout (Bottom view)



Unit: mm

HFD41A



Technical drawing of a rectangular plate. The overall dimensions are 10.16 (width) and 7.62 (height). There are four holes, each with a diameter of 5-Ø1. The holes are arranged in a 2x2 grid. The distance between the centers of the holes is 2.54 (width) and 7.62 (height). The drawing includes a dashed rectangle representing the hole pattern and a solid rectangle representing the plate boundaries.

