

HFD41/D41A

SUBMINIATURE SIGNAL RELAY



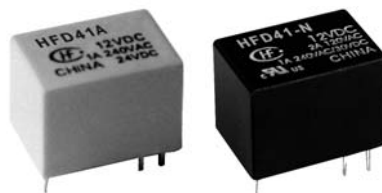
File No.: E133481



File No.: R50265409
(Only HFD41A)



File No.: CQC15002123047 (Only HFD41A)



Features

- 5A switching capability
- 1 Form C configuration
- Standard PCB layout
- Plastic sealed and flux proofed types available
- UL insulation system: Class F 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 max. (at 1A 6VDC)
Contact material	AgNi, AgCdO
Contact rating (Res. load)	1A 120VAC, 1A 240VAC / 30VDC 3A 120VAC 2A 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	9.9 x 10 ⁴ OPS (1A 120VAC, 1A 30VDC, Resistive load, Room temp., 1s on 9s off)

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		5% 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.
3) UL insulation system: Class F, Class B.

COIL

Coil power	B type: Approx. 450mW; N type: Approx. 360mW; H type: Approx. 200mW
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COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. 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 120VAC, 1A 240VAC/30VDC 2A 120VAC, 3A 120VAC 5A 120VAC
TÜV	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.



HONGFA RELAY

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

2015 Rev. 1.01

ORDERING INFORMATION

Type	HFD41 /12VDC -N S G F 3 (XXX) HFD41A						
Coil voltage	3, 5, 6, 9, 12, 24 VDC						
Coil power	H: 200mW N: 360mW B: 450mW						
Construction ¹⁾²⁾	S: Plastic sealed Nil: Flux proofed						
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.

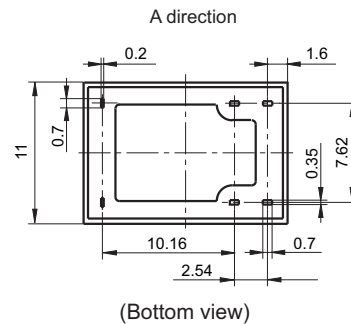
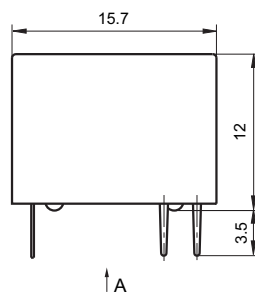
4) The customer special requirement express as special code after evaluating by Hongfa.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

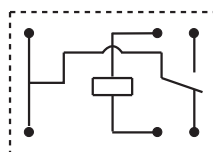
Unit: mm

Outline Dimensions

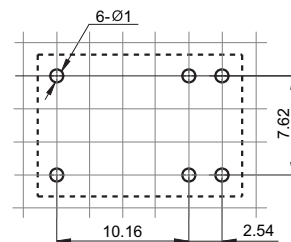
HFD41



Wiring Diagram
(Bottom view)

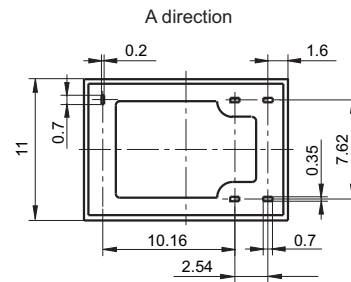


PCB Layout
(Bottom view)



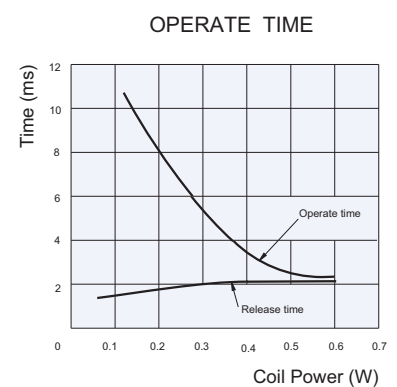
Unit: mm

HFD41A



Technical drawing of a rectangular plate. The overall dimensions are 10.16 (width) and 7.62 (height). There are four circular 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.

CHARACTERISTIC CURVES



Resistive load, Room temp., 1s on 9s off.

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Таблица возможной замены реле

силовые реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HF3FF	HJR-3FF	SRD(T73)	HLS8-T73	G5L
HF10FF-2			HLS-MK2P	MK2
HF10FF-3Z			HLS-MK3P	MK3
HF13F			HLS-13F	
HF18FF	HJQ-22		HLS-4453(18F)-4	MY4
HF21FF	HJR-21FF	SRU(22F)	HLS8-22F	G5L-E
HF32F	TRG1	SRSB	HLS-32F	835/835NL
HF32FA/32FA-T	TRG1	SRSB	HLS-32F	835/835NL
HF32FA-G	TRG1	SRSB	HLS-32F	835/835NL
HF33F	TRG2	SRSC	HLS-33F	G5SB
HF62F	TRA2F	SMIH(14FHA)	HLS-14FK	G5J
HF46F/HF46F-G	TRGB			202/202H
HF49FD				G5J
HF102F	TRAF		HLS-102F	G4A
HF115F	TRC2	SMIH(14FH)	HLS-14F2	G2RL
HF115FP	TRC3	SMIH(14FH)	HLS-14F3	
HF140FF	TRA3		HLS-14F	G2R/G2RG
HF13F	HJQ-13F-2C	SMB(13F)	HLS-13F-2	LY2
HF2100	HJQ-15F-1	SLC(T91)	HLS-T91(16F)-1	G7G
HF105F - 4	HJQ-15F-3	SLCH(T92)		
HF105F-1	HJQ-15F	SLA(T90)	HLS-T90(15F)	G8P
HF2160	HJQ-15F-2	SLI(T93)	HLS-T91(16F)-2	G7G/G8G
HF165FD	HJQ-15F	SLA	HLS-T90(15F)	G8P
JQC-21FF	HJR-21FF	SRD(T73)	HLS8-22F	
HF7FF	HJR-7FF	SRG(4123)	HLS8-T73	
HF141FF	TRA1		HLS-14F1	G2R
HF14FW	TRA2	SMIH(14FH)	HLS-14F2	G2R
HF14FF	TRA1		HLS-14F	G2R
HF36F	TRA4			
HF42F	TRA5			G5PA-2
HF8	TRDH	SRI(T72)	HLS-T72	
HF102F			HLS-102F	G4A
HLS-4453(18F)-2		SMBH(4453)	HLS-4453(18F)-2	MY2
HF18FF-3Z			HLS-4453(18F)-3	MY3

сигнальные реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HFD2	HJR1	SRC	HLS-4078	G5V-2
HFD4				
HFD27	HJR1-2	SRC	HLS-4078	G5V-2
HFD41	HJR4102	SRS		
HF41F			HLS6-4100H-1	G2E
HM4101F	HJR4102E			
HFD23			HLS6-23F	G5V-1

автомобильные реле

HONGFA	TIANBO	SONGLE	HELISUN	OMRON
HFKM, HFKS	TRAW	SLE(4117)	HLS-4117	
HVF6	TRFM			G8HN
HFKP	TRKP	SLB	HLS-4120	G8PE
	TRS			
	TRV3			
HFV4	TRV4	SLD	HLS-CMA3	G8JN
	TRV5			
HFV7	TRV6	SLDH	HLS-CMA3-1	G8JR
HFKW	HJR78F	SRA(T74)	HLS-T78	G8QN
			HLS-4121/4122	
HFV6		SLM	HLS-CMA6	G8H