

HF10FH (JQX-10FH)

MINIATURE HIGH POWER RELAY



File No.:134517



Features

- 10A switching capability
- Long endurance (Min. 100,000 electrical operations)
- Industry standard 8 or 11 round terminals
- Sockets available
- With push button
- Smoke cover type available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (35.5 x 35.5 x 55.3) mm

CONTACT DATA

Contact arrangement	2C, 3C
Contact resistance	100mΩ (at 1A 24VDC)
Contact material	AgSnO ₂ , AgCdO
Contact rating (Res. load)	2C: 10A 250VAC/30VDC 3C: (NO)10A 250VAC/30VDC (NC) 5A 250VAC/30VDC
Max. switching voltage	250VAC / 30VDC
Max. switching current	10A
Max. switching power	300W / 2500VA
Mechanical endurance	1 x 10 ⁷ OPS
Electrical endurance	1 x 10 ⁵ OPS

CHARACTERISTICS

Insulation resistance		500MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	2500VAC 1min
	Between open contacts	2000VAC 1min
Operate time (at nomi. volt.)		30ms max.
Release time (at nomi. volt.)		30ms max.
Temperature rise (at nomi. volt.)		70K max.
Shock resistance	Functional	100m/s ² (10g)
	Destructive	1000m/s ² (100g)
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		98% RH, 40°C
Ambient temperature		-40°C to 55°C
Termination		Octal and Undecal Type Plug
Unit weight		Approx. 100g
Construction		Dust protected

Notes: The data shown above are initial values.

COIL

Coil power	DC type: 1.5W; AC type: 2.7VA
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COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
6	4.80	0.60	7.20	23.5 x (1±10%)
12	9.60	1.20	14.4	95 x (1±10%)
24	19.2	2.40	28.8	430 x (1±10%)
48	38.4	4.80	57.6	1630 x (1±10%)
60	48.0	6.00	72.0	1920 x (1±10%)
100	80.0	10.0	120	6800 x (1±10%)
110	88.0	11.0	132	7300 x (1±10%)

Nominal Voltage VAC	Pick-up Voltage VAC	Drop-out Voltage VAC	Max. Allowable Voltage VAC	Coil Resistance Ω
6	4.80	1.80	7.20	3.9 x (1±10%)
12	9.60	3.60	14.4	16.9 x (1±10%)
24	19.2	7.20	28.8	70 x (1±10%)
48	38.4	14.4	57.6	315 x (1±10%)
110/120	88.0	36.0	132	1600 x (1±10%)
220/240	176	72.0	264	6800 x (1±10%)

SAFETY APPROVAL RATINGS

UL&CUR	10A 250VAC/30VDC
	1/3HP 240VAC
	1/3HP 120VAC
	1/2HP 277VAC

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



HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2007 Rev. 2.00

ORDERING INFORMATION

HF10FH / 012 A -2Z D T G (XXX)	
Type ¹⁾	HF10FH JQX-10FH (Old type)
Coil voltage	DC: 6, 12, 24, 48, 100, 110 AC: 6, 12, 24, 48, 110/120, 220/240
Coil voltage form	A: AC D: DC
Contact arrangement	2Z: 2 Form C 3Z: 3 Form C 3Z-1: 3 Form C (Different Wiring Diagram)
LED	D: With LED Nil: Without LED
Contact material	T: AgSnO ₂ Nil: AgCdO
Contact plating	G: Gold plated Nil: No gold plated
Customer special code ²⁾	e.g. (551) stands for RoHS compliant (Cadmium containing contacts) (Only for special requirements) (555) stands for RoHS compliant (Cadmium-free contacts)

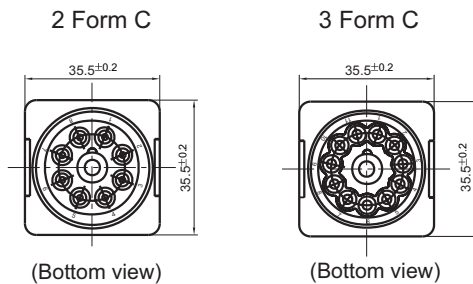
Notes: 1) We have now gradually updated our ordering information. We suggest new type should be selected. If necessary, old type can be kept for some period for the old customers.

2) HF10FH is an environmental friendly product. Please mark a special code (555) or (551) when ordering. (551) stands RoHS compliant with Cadmium contact; (555) stands for RoHS compliant with Cadmium-free contact.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

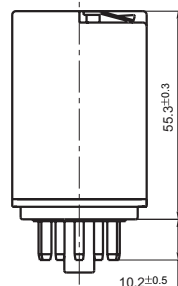
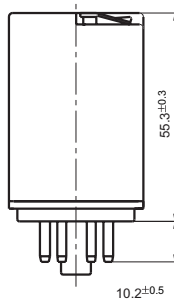
Unit: mm

Outline Dimensions



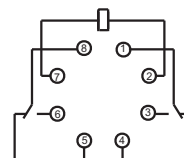
(Bottom view)

(Bottom view)

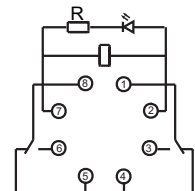


Wiring Diagram
(Bottom view)

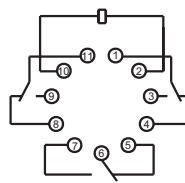
2 Form C



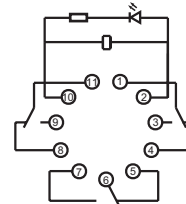
2 Form C (With LED)



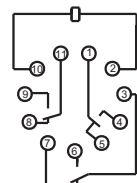
3 Form C



3 Form C (With LED)

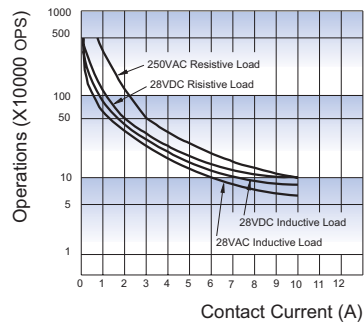


3 Form C
(Different Wiring Diagram)

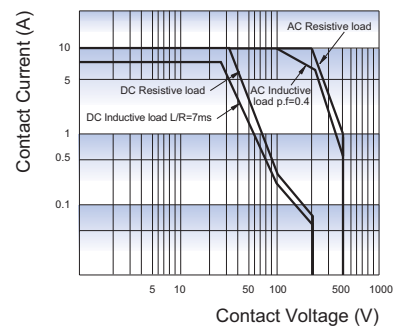


CHARACTERISTIC CURVES

ENDURANCE CURVE



MAXIMUM SWITCHING POWER



Disclaimer

This datasheet is for the customers' reference. All the specifications are 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.