

# HFD23 (JRC-23F)

# SUBMINIATURE SIGNAL RELAY



File No.:E133481



File No.:CQC02001001948



### Features

- Max.2A switching capability
- High sensitive: 150mW
- 1 Form C configuration
- Wash tight type available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (12.5 x 7.5 x 10.0) mm

### CONTACT DATA

Contact arrangement	1C
Contact resistance	100mΩ(at 0.1A 6VDC)
Contact material	AgNi +Au plated
Contact rating (Res. load)	0.5A 125VAC / 1A 30VDC
Max. switching voltage	125VAC / 60VDC
Max. switching current	2A
Max. switching power	62.5VA / 30W
Min. permissible load	1mA 5V
Mechanical endurance	1x10 <sup>7</sup> OPS (300OPS/min.)
Electrical endurance	1x10 <sup>5</sup> OPS (30OPS/min.)

### CHARACTERISTICS

Insulation resistance	1000MΩ(at 500VDC)	
Dielectric strength	Between coil & contacts	1000VAC 1min
	Between open contacts	400VAC 1min
Operate time (at nomi. volt.)	5ms max.	
Release time (at nomi. volt.)	5ms max.	
Bounce time (at nomi.volt.)	5ms max.	
Temperature rise (at nomi.volt.)	65K max.	
Shock resistance	100m/s <sup>2</sup> (10g)	
Vibration resistance	10Hz to 55Hz 3.3mm DA	
Humidity	35% to 85% RH	
Ambient temperature	-30°C to 70°C	
Unit weight	Approx. 2.2g	
Termination	PCB (DIP)	
Construction	Wash tight	

Notes: The data shown above are initial values.

### COIL

Coil power	Sensitive:150mW; Standard: 200mW
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### COIL DATA

at 23°C

#### Standard Type (200mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
1.5	1.20	0.15	2.25	11.3 x (1±10%)
3	2.40	0.30	4.5	45 x (1±10%)
5	4.00	0.50	7.5	125 x (1±10%)
6	4.80	0.60	9.0	180 x (1±10%)
9	7.20	0.90	13.5	405 x (1±10%)
12	9.60	1.20	18.0	720 x (1±10%)
24	19.20	2.40	36.0	2880 x (1±15%)

#### Sensitive Type (150mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
1.5	1.20	0.15	2.25	15 x (1±10%)
3	2.40	0.30	4.5	60 x (1±10%)
5	4.00	0.50	7.5	167 x (1±10%)
6	4.80	0.60	9.0	240 x (1±10%)
9	7.20	0.90	13.5	540 x (1±10%)
12	9.60	1.20	18.0	960 x (1±10%)
24	19.20	2.40	36.0	3840 x (1±15%)

### SAFETY APPROVAL RATINGS

UL&CUR	1.0A 30VDC
	0.3A 60VDC
	0.5A 125VAC

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

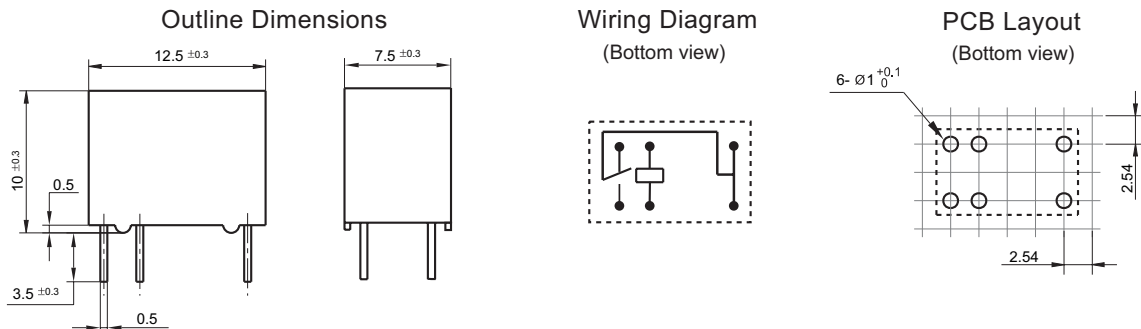
		<b>HFD23 /</b>	<b>012</b>	<b>-1Z</b>	<b>S</b>	<b>(XXX)</b>
<b>Type</b> <sup>1)</sup>	HFD23 JRC-23F (Old type)					
<b>Coil voltage</b>	1.5, 3, 5, 6, 9, 12, 24VDC					
<b>Contact arrangement</b>	1Z: 1 Form C					
<b>Coil power</b>	<b>S:</b> Sensitive type (150mW)		<b>P:</b> Standard type (200mW)			
<b>Customer special code</b> <sup>2)</sup>	Only for special requirements, e.g. (555) stands for RoHS compliant					

**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) HFD23 is an environmental friendly product. Please mark a special code (555) when ordering.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

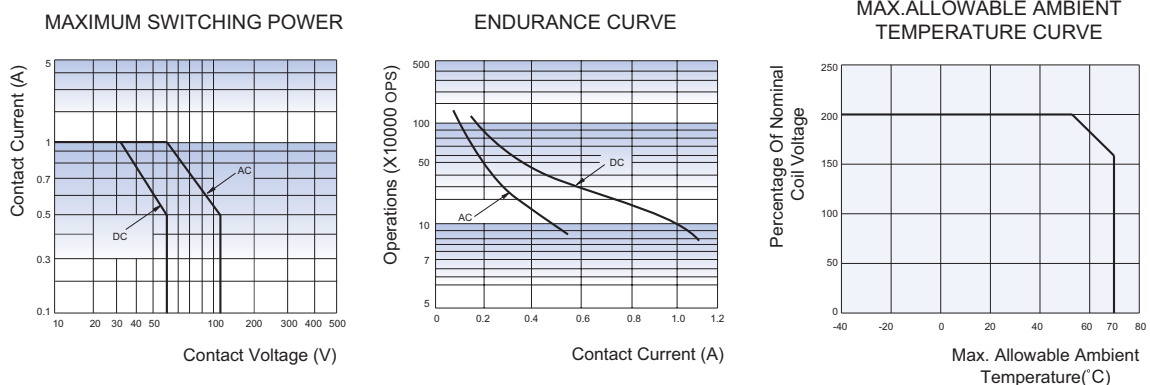


Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

2) The tolerance without indicating for PCB layout is always  $\pm 0.1$ mm.

3) The width of the gridding is 2.54mm.

## CHARACTERISTIC CURVES



### 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.

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