

# JRC-23F (HFD23)

# SUBMINIATURE SIGNAL RELAY



File No.:E133481



File No.:CQC02001001948



### Features

- Max.2A switching capability
- High sensitivity :150 mW
- 1 Form C configuration
- Sealed IP67 type available
- Environmental friendly product available (RoHS compliant)
- Outline Dimensions: 12.5 x 7.5 x 10.0 mm

### CONTACT DATA

Contact arrangement	1C
Initial contact resistance Max.	100mΩ (at 1A 6VDC)
Contact material	AgNi +Au plated
Contact rating (Res. load)	0.3A 60VDC / 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 life	1x10 <sup>7</sup> OPS (300OPS/min.)
Electrical life	1x10 <sup>5</sup> OPS (30OPS/min.)

### CHARACTERISTICS

Initial insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	1000VAC 1min.
	Between open contacts	400VAC 1min.
Operate time (at nomi. volt.)	Max. 5ms	
Release time (at nomi. volt.)	Max. 5ms	
Bounce time (at nomi.volt.)	Max. 5ms	
Temperature rise (at nomi.volt.)	Max. 55°C	
Shock resistance	100m/s <sup>2</sup>	
Vibration resistance	10 to 55Hz 3.3mm	
Humidity	35 to 85% RH	
Ambient temperature	-30° C to +70° C	
Unit weight	2.2g	
Termination	PCB (DIP)	
Construction	Sealed IP67	

### COIL

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

Standard Type (200mW) at 20° C

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Current (mA)	Coil Resistance (Ω)
1.5	1.20	0.15	132.7	11.3±10%
3	2.40	0.30	66.7	45±10%
5	4.00	0.50	40.0	125±10%
6	4.80	0.60	33.3	180±10%
9	7.20	0.90	22.2	405±10%
12	9.60	1.20	16.7	720±10%
24	19.20	2.40	8.33	2880±15%

Sensitive Type (150mW) at 20° C

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Current (mA)	Coil Resistance (Ω)
1.5	1.20	0.15	100	15±10%
3	2.40	0.30	50.0	60±10%
5	4.00	0.50	29.9	167±10%
6	4.80	0.60	25.0	240±10%
9	7.20	0.90	16.7	540±10%
12	9.60	1.20	12.5	960±10%
24	19.20	2.40	6.25	3840±15%

Max Allowable Coil Voltage:160% Nominal Voltage at 60° C;  
150% Nominal Voltage at 70° C.

### SAFETY APPROVAL RATINGS

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

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2005 Rev. 1.01

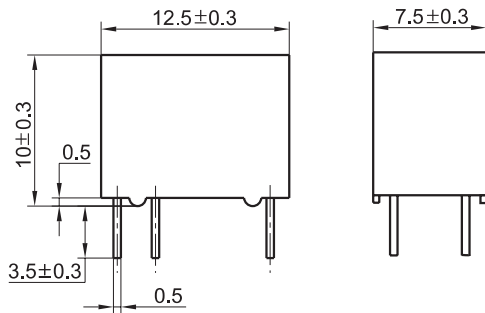
## ORDERING INFORMATION

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

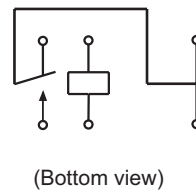
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

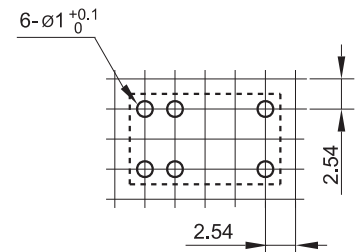
Outline Dimensions



Wiring Diagram

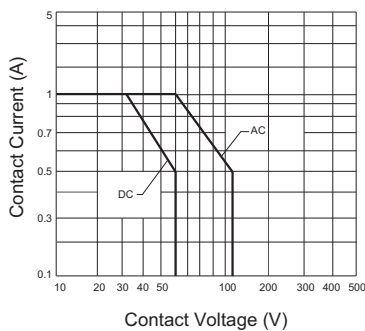


PCB Layout

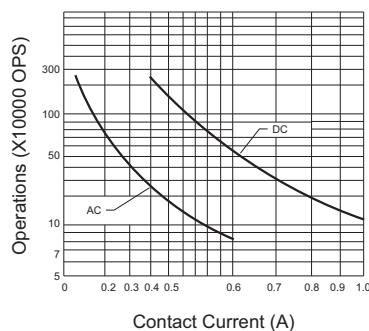


## CHARACTERISTIC CURVES

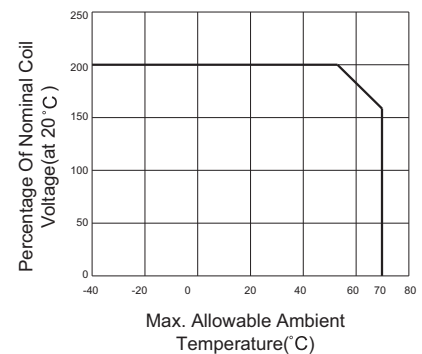
MAXIMUM SWITCHING POWER



LIFE CURVE



MAX.ALLOWABLE AMBIENT TEMPERATURE CURVE



### 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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