

# JRC-27F (HFD27)

# SUBMINIATURE DIP RELAY



File No.:E133481



File No.:R50075362



File No.:CQC02001001938



## Features

- 2 Form C configuration
- High switching capacity:125VA/60W
- Matching 16 pin IC socket
- Bifurcated contacts
- Epoxy sealed for automatic-wave soldering and cleaning
- Environmental friendly product available (RoHS compliant)
- Outline Dimensions: 20.2 x 10.0 x 11.5 mm

## CONTACT DATA

Contact arrangement	2C
Initial contact resistance Max.	50mΩ
Contact material	AgNi + Au plated
Contact rating (Res. load)	2A 30VDC 1A 125VAC
Max. switching power	125VA / 60W
Max. switching voltage	120VDC / 240VAC
Max. switching current	2A
Min. applicable load	10mV 10μA
Mechanical life	1x10 <sup>8</sup> OPS
Electrical life	1x10 <sup>5</sup> OPS (at 2A 30VDC)
	3x10 <sup>5</sup> OPS (at 1A 30VDC)

## CHARACTERISTICS

Initial insulation resistance	1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts 1500VAC 1min.
	Between open contacts M, S: 1000VAC 1min. H: 750VAC 1min.
Operate time (at nomi. volt.)	Max. 6ms
Release time (at nomi. volt.)	Max. 4ms
Ambient temperature	-40°C to +85°C
Humidity	40 to 85% RH
Vibration resistance	10 to 55Hz 1.5mm DA
Shock resistance	Functional 196m/s <sup>2</sup> (20g)
	Destructive 980m/s <sup>2</sup> (100g)
Termination	PCB (DIP)
Unit weight	Approx. 5g
Construction	Sealed IP67

## COIL

Coil power	Standard: 280 to 580mW
	Sensitive: 200mW
	High Sensitive: 150mW
Temperature rise	Max. 65°C

## COIL DATA

Standard (280 to 580mW) at 20°C					
Order Number	Coil Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resistance (Ω±10%)	Max. Allowable Voltage (VDC)
003-M	3	2.25	0.3	30	4.5
005-M	5	3.75	0.5	90	8.0
006-M	6	4.50	0.6	130	10.0
009-M	9	6.80	0.9	280	14.5
012-M	12	9.00	1.2	450	18.5
015-M	15	11.3	1.5	625	22.0
024-M	24	18.0	2.4	1600	35.5
048-M	48	36.0	4.8	4000	56.0
Sensitive (200mW) at 20°C					
Order Number	Coil Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resistance (Ω±10%)	Max. Allowable Voltage (VDC)
003-S	3	2.25	0.3	45	6
005-S	5	3.75	0.5	125	10
006-S	6	4.50	0.6	180	12
009-S	9	6.80	0.9	405	18
012-S	12	9.00	1.2	720	24
015-S	15	11.3	1.5	1125	30
024-S	24	18.0	2.4	2880	48



HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2006 Rev. 1.11

## COIL DATA

High Sensitive (150mW) 20°C

Order Number	Coil Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Coil Resistance ( $\Omega \pm 10\%$ )	Max. Allowable Voltage (VDC)
003-H	3	2.4	0.3	60	7.0
005-H	5	4.0	0.5	167	11.5
006-H	6	4.8	0.6	240	13.8
009-H	9	7.2	0.9	540	20.8
012-H	12	9.6	1.2	960	27.7
015-H	15	12.0	1.5	1500	34.6
024-H	24	19.2	2.4	3840	55.2

**Notes:** When user's requirements can't be found in the above table, special order allowed.

## SAFETY APPROVAL RATINGS

<b>UL&amp;CUR</b>	2A 30VDC
	1A 125VAC
<b>Tüv</b>	2A 30VDC
	1A 125VAC

## ORDERING INFORMATION

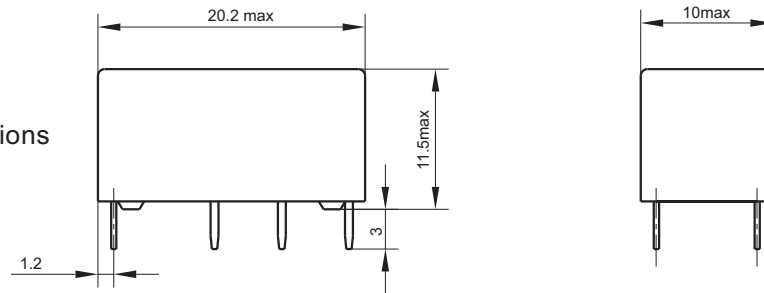
Type	JRC-27F /	012	S	XXX
Coil voltage	3, 5, 6, 9, 12, 15, 24, 48VDC			
Coil power	M: Standard (280 to 580mW) S: Sensitive (200mW) H: high-Sensitive (150mW)			
Customer special code	(Only for special requirements, e.g. 555 stands for RoHS compliant)			

**Notes:** 48VDC coil voltage is only for single side stable version.

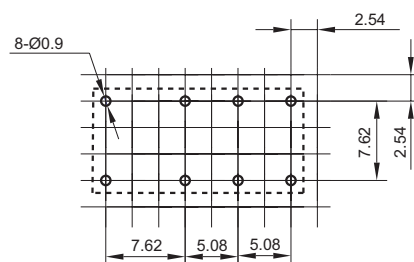
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

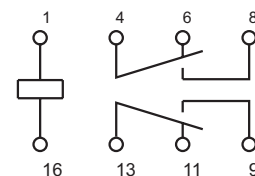
Outline Dimensions



PCB Layout

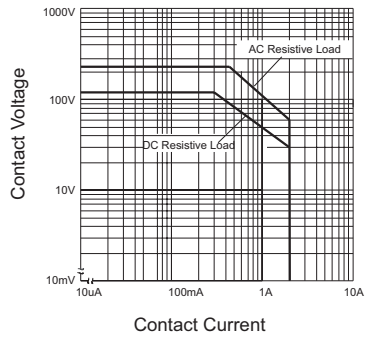


Wiring Diagram

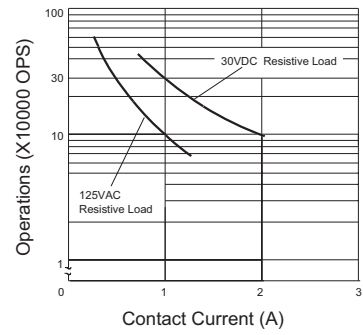


## CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



LIFE 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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