

HF54FF (JQX-54FF)

MINIATURE HIGH POWER RELAY



File No.:E134517



File No.:40014655



File No.:CQC02001001955



Features

- 25A switching capability
- 60A Withstand inrush current
- Suitable to switch motor load
- 1 Form A and 1 Form C configurations
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (32.0 x 31.0 x 19.0) mm

CONTACT DATA

Contact Arrangement	1A	1C
Contact resistance	50mΩ (at 1A 6VDC)	
Contact material	AgCdO	
Contact rating	Resistive	20A 250VAC/24VDC 15A 250VAC/24VDC
	Motor	1.5HP 250VAC
Max. switching voltage	250VAC	
Max. switching current	25A	15A
Max. switching power	6250VA / 600W	3750VA / 360W
Mechanical endurance	5 x 10 ⁵ OPS	
Electrical endurance	2 x 10 ⁵ OPS	

COIL

Coil power	900mW
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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
5	3.50	0.50	5.5	27.8 x (1±10%)
6	4.20	0.60	6.6	40 x (1±10%)
12	8.40	1.20	13.2	160 x (1±10%)
24	16.8	2.40	26.4	640 x (1±10%)
48	33.6	4.8	52.8	2560 x (1±10%)

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	3000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)	15ms max.	
Release time (at nomi. volt.)	10ms max.	
Temperature rise (at nomi. vot.)	60K max.	
Shock resistance	Functional	100m/s ² (10g)
	Destructive	1000m/s ² (100g)
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Ambient temperature	-40°C to 70°C	
Humidity	35% to 95% RH, 40°C	
Termination	Panel mount, QC	
Unit weight	Approx. 42g	
Construction	Dust protected	

Notes: The data shown above are initial values.

SAFETY APPROVAL RATINGS

UL&CUR	1 Form C	15A 250VAC COSØ =1 (NO) 10A 250VAC COSØ =1 (NC)
	1 Form A	20A 250VAC COSØ =1
VDE		NO:20A 220VAC NC:15A 220VAC

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

HF54FF / 012D -H 2 5 (XXX)	
Type ¹⁾	HF54FF JQX-54FF (Old type)
Coil voltage	5, 6, 12, 24, 48VDC
Contact arrangement	H: 1 Form A Z: 1 Form C
Installation form	2: QC
Termination	5: (See the following)
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.

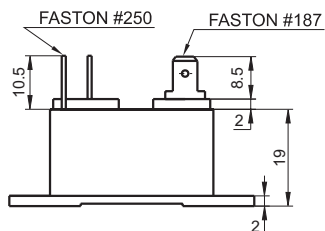
2) HF54FF is an environmental friendly product. Please mark a special code (555) or (551) when ordering. (551) stands RoHS compliant with Cadmium contact; (555) stands for RoHS compliant with Cadmium-free contact.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

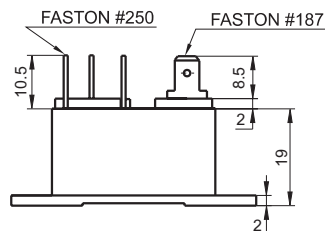
Outline Dimensions

1 Form A



(Top view)

1 Form C



(Top view)

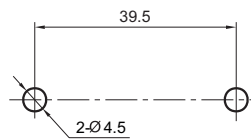
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Wiring Diagram
(Top view)



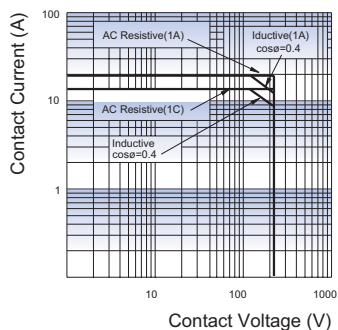
Mounting hole



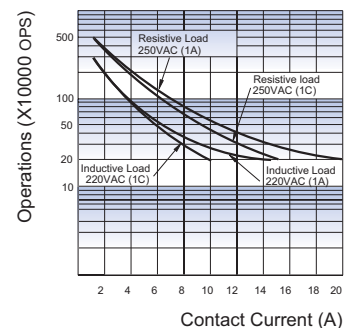
- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



ENDURANCE 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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