

HF38F (JZC-38F)

SUBMINIATURE INTERMEDIATE POWER RELAY



File No.:E133481



File No.:R50063830



File No.:CQC02001001944



Features

- 5A switching capability
- 1 Form A and 1 Form C
- Standard and sensitive coils available
- Wash tight and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (20.5 x 10.5 x 20.5) mm

CONTACT DATA

Contact arrangement	1A, 1C
Contact resistance	100mΩ (at 1A 6VDC)
Contact material	See ordering info.
Contact rating (Res. load)	NO: 5A 250VAC/30VDC NC: 3A 250VAC/30VDC
Max. switching voltage	250VAC / 30VDC
Max. switching current	5A
Max. switching power	1250VA / 150W
Mechanical endurance	1x 10 ⁷ ops
Electrical endurance	1 x 10 ⁵ ops

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	2000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)	10ms max.	
Release time (at nomi. volt.)	5ms max.	
Humidity	45% to 85% RH	
Ambient temperature	-40°C to 85°C	
Shock resistance	Functional	100 m/s ² (10g)
	Destructive	1000m/s ² (100g)
Vibration resistance	10Hz to 55Hz 3.3mm DA	
Termination	PCB	
Unit weight	Approx. 8g	
Construction	Wash tight, Flux proofed	

Notes: 1) The data shown above are initial values.
2) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power	Standard: 360mW; Sensitive: 250mW
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COIL DATA

at 23°C

Standard Type

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.1	0.15	3.9	25 x (1±10%)
5	3.5	0.25	6.5	69 x (1±10%)
6	4.2	0.30	7.8	100 x (1±10%)
9	6.3	0.45	11.7	225 x (1±10%)
12	8.4	0.60	15.6	400 x (1±10%)
18	12.6	0.90	23.4	900 x (1±10%)
24	16.8	1.20	31.2	1600 x (1±10%)
48	33.6	2.40	62.4	6400 x (1±10%)

Sensitive Type

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.2	0.15	3.9	36 x (1±10%)
5	3.6	0.25	6.5	100 x (1±10%)
6	4.3	0.30	7.8	145 x (1±10%)
9	6.5	0.45	11.7	325 x (1±10%)
12	8.6	0.60	15.6	575 x (1±10%)
18	13.0	0.90	23.4	1300 x (1±10%)
24	17.3	1.20	31.2	2310 x (1±10%)
48	34.6	2.40	62.4	9220 x (1±10%)

SAFETY APPROVAL RATINGS

UL&CUR	5A 250VAC/30VDC
TÜV (AgNi, AgCdO)	NO: 5A 250VAC/30VDC NC: 3A 250VAC/30VDC

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

		HF38F /		012	-H	S	L	T	(XXX)
Type ¹⁾	HF38F JZC-38F (Old type)								
Coil voltage	3, 5, 6, 9, 12, 18, 24, 48VDC								
Contact arrangement	H: 1 Form A		Z: 1 Form C						
Construction ²⁾	S: Wash tight		Nil: Flux proofed						
Coil power	L: Sensitive		Nil: Standard						
Contact material	T: AgSnO ₂		3: AgNi		Nil: AgCdO				
Customer special code ³⁾	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) Under the ambience with dangerous gas like H₂S, SO₂ or NO₂, wash tight type is recommended; please test the relay in real applications. If the ambience allows, flux proofed is preferentially recommended.

3) HF38F 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

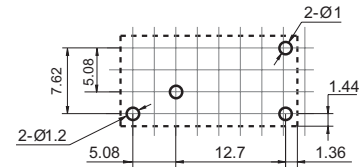
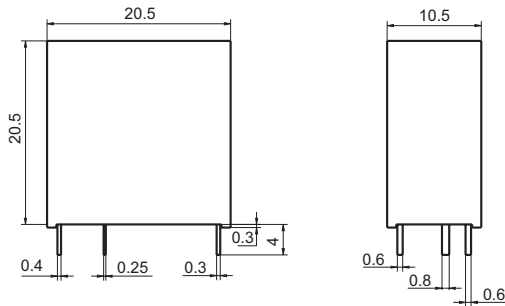
Wiring Diagram

PCB Layout

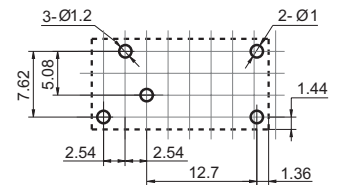
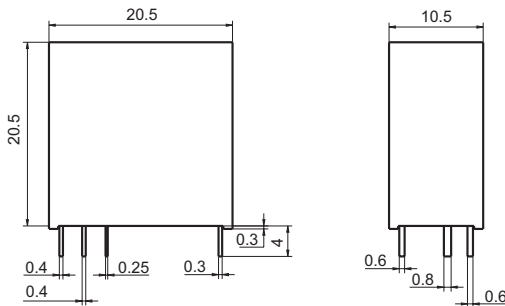
(Bottom view)

(Bottom view)

1 Form A



1 Form C



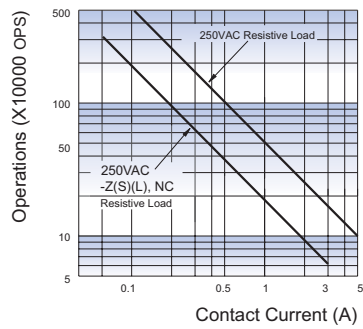
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

2) The tolerance without indicating for PCB layout is always ± 0.1 mm.

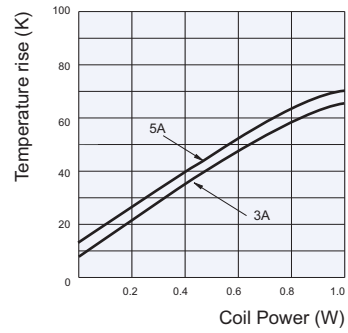
3) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES

ENDURANCE CURVE



COIL TEMPERATURE RISE



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.