


HF37F (JQX-37F)

MINIATURE HIGH POWER RELAY



US
File No.:E134517

CQC
File No.:CQC02001001955

Features

- 30A switching capability
- 70A withstands inrush current
- TV-15 (at 120VAC) available
- 1 Form A configuration
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (35.2 x 32.2 x 24.0) mm

CONTACT DATA

Contact arrangement	1A
Contact resistance	30mΩ (at 1A 6VDC)
Contact material	AgSnO ₂ , AgCdO
Contact rating (Res. load)	30A 250VAC
Max. switching voltage	277VAC
Max. switching current	30A
Max. switching power	7500VA
Mechanical endurance	5 x 10 ⁶ OPS
Electrical endurance	1 x 10 ⁵ OPS

COIL

Coil power	1.2W
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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	6.0	20.8 x (1±10%)
6	4.20	0.60	7.2	30 x (1±10%)
9	6.30	0.90	10.8	67.5 x (1±10%)
12	8.40	1.20	14.4	120 x (1±10%)
24	16.8	2.40	28.8	480 x (1±10%)
48	33.6	4.80	57.6	1920 x (1±10%)
60	42.0	6.00	72.0	3000 x (1±10%)

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts 4000VAC 1min
	Between open contacts 1200VAC 1min
Operate time (at nomi. volt.)	20ms max.
Release time (at nomi. volt.)	5ms max.
Shock resistance	Functional 200m/s ² (20g)
	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	QC
Unit weight	Approx. 55g
Construction	Dust protected

Notes: 1) The data shown above are initial values.

2) Please find coil temperature curve in the characteristic curves below.

SAFETY APPROVAL RATINGS

UL&CUR	30A 250VAC
	2HP 125VAC/250VAC
	TV-15 120VAC

Notes: Only some typical ratings are listed above. If more details are required, please contact us.



ORDERING INFORMATION

HF37F / 012 -1H T (XXX)	
Type ¹⁾	HF37F JQX-37F (Old type)
Coil voltage	5, 6, 9, 12, 24, 48, 60VDC
Contact arrangement	1H: 1 Form A
Contact material	T: AgSnO ₂ Nil: AgCdO
Customer special code ²⁾ (Only for special requirements)	e.g. (551) stands for RoHS compliant (Cadmium containing contacts) (555) stands for RoHS compliant (Cadmium-free contacts)

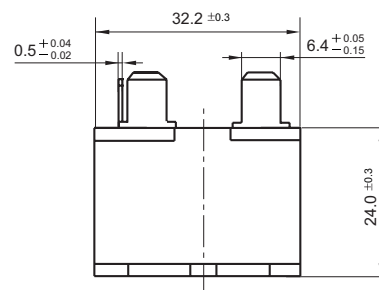
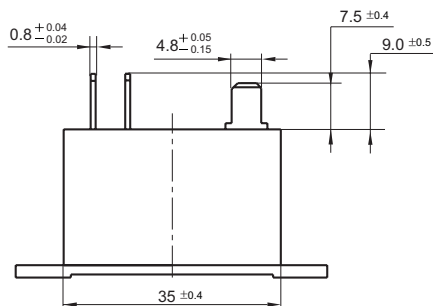
Notes: 1) We have now gradually updated our ordering information. We suggest new type should be selected. If necessary, old type can be kept for some period for the old customers.

2) HF37F 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.

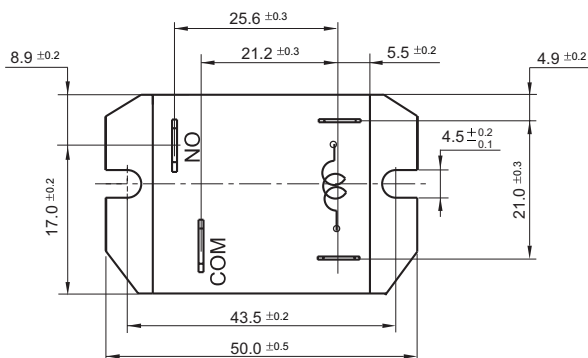
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

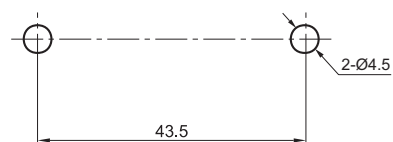
Outline Dimensions



PCB Layout (Bottom view)



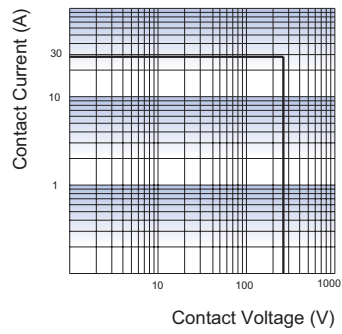
Mounting holes



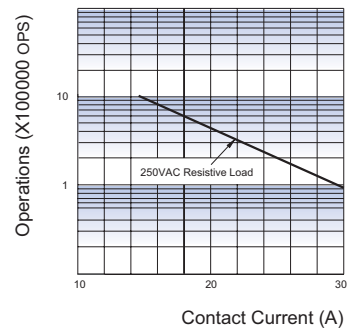
Remark: In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

CHARACTERISTIC CURVES

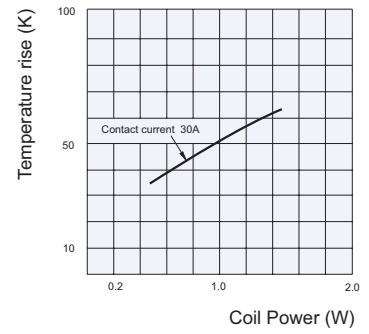
MAXIMUM SWITCHING POWER



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.