

JQX-68F (HF68F)

MINIATURE HIGH POWER RELAY



File No.:16264



File No.:E134571



File No.:129371



File No.:CQC02001001945



Features

- Low height 12.3 mm
- 8A switching capability
- 5KV dielectric strength (between coil and contacts)
- Creepage distance >8mm
- Sealed IP67 and flux proof types available
- Environmental friendly product available (RoHS compliant)
- Outline Dimensions: 28.5 x 10.1 x 12.3mm

CONTACT DATA

Contact arrangement	1A, 1C
Initial contact resistance Max.	100mΩ (at 1A 6VDC)
Contact material	See ordering info.
Contact rating (Res. load)	8A 250VAC/30VDC
Max. switching voltage	440VAC / 125VDC
Max. switching current	10A
Max. switching power	2000VA / 240W (at 0.5HP 250VAC)
Mechanical life	1 x 10 ⁷ OPS
Electrical life	1 x 10 ⁵ OPS

CHARACTERISTICS

Initial insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	5000VAC 1min.
	Between open contacts	1000VAC 1min.
Surge voltage (between coil & contacts)	10KV (1.2X50μs)	
Operate time (at nomi. volt.)	Max. 15ms	
Release time (at nomi. volt.)	Max. 8ms	
Temperature rise (at nomi. volt.)	55°C	
Humidity	35 to 85% RH	
Ambient temperature	-40°C to +85°C	
Shock resistance	Functional	100m/s ²
	Destructive	1000m/s ²
Vibration resistance	10 to 500Hz 20g/5g	
Termination	PCB	
Unit weight	8.2g	
Construction	Sealed IP67, Flux proof	

COIL

Coil power	5~24VDC: 220mW; 48~60VDC: 290mW
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COIL DATA

Nominal Voltage (VDC)	Pick-up Voltage (VDC)	Drop-out Voltage (VDC)	Max. Allowable Voltage (VDC) 20°C	Coil Resistance (Ω) 20°C
5	3.75	0.50	11.8	113 ± 10%
6	4.50	0.60	14.1	164 ± 10%
12	9.00	1.20	28.2	620 ± 10%
18	13.50	1.80	42.3	1295 ± 10%
24	18.00	2.40	56.4	2350 ± 10%
48	36.00	4.80	112.8	9600 ± 15%
60	45.00	6.00	141.0	12500 ± 15%

Notes: The max. allowable voltage in the COIL DATA is coil overdrive voltage, it is the instantaneous max. voltage which the relay coil could endure in a very short time.

SAFETY APPROVAL RATINGS

UL & CUR	AgCdO	8A 250VAC/30VDC 10A/250VAC B300, R300 Pilot duty	
		8A 250VAC/30VDC	
VDE	Specifications		Ratings
	AgCdO	JQX-68F...1 (H;Z)(S)(G)(F)	8A 250VAC COSØ =1 at 70°C
	AgNi	JQX-68F...1 (H;Z)(S)B(G)(F)	8A 250VAC COSØ =1 at 85°C 5A 250VAC COSØ =1 at 85°C
	AgSnO ₂	JQX-68F...1 (H;Z)(S)T(G)(F)	8A 250VAC COSØ =1 at 85°C 10A/4A 250VAC COSØ =1 at 50°C
FIMKO	8A/10A 250VAC COSØ =1 at 55°C		



HONGFA RELAY

ISO9001、ISO/TS16949、ISO14001、OHSAS18001 CERTIFIED

2006 Rev. 1.10

ORDERING INFORMATION

JQX-68F / 012 1H S G F XXX	
Type	
Coil voltage	5, 6, 12, 18, 24, 48, 60VDC
Contact arrangement	1H: 1 Form A 1Z: 1 Form C
Construction	S: Sealed IP67 Nil: Flux proof
Contact material	G: AgCdO+ Au plated T: AgSnO ₂ B: AgNi BG: AgNi+ Au plated Nil: AgCdO
Insulation standard	F: Class F Nil: Class B
Customer special code (Only for special requirements)	e.g. 551 stands for RoHS compliant (Cadmium containing contacts) 555 stands for RoHS compliant (Cadmium-free contacts)

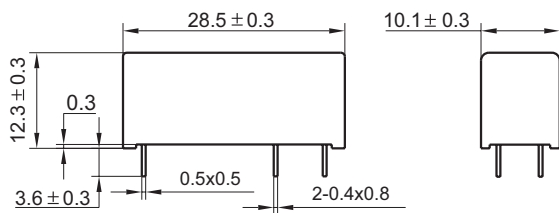
Notes: For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

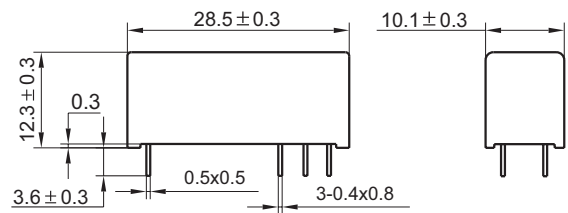
Unit: mm

Outline Dimensions

1 Form A (5mm Pinning)

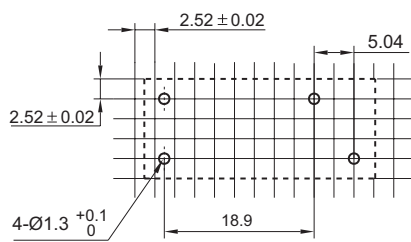


1 Form C (3.2mm Pinning)

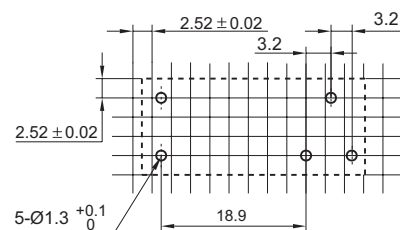


PCB Layout

1 Form A (5mm Pinning)

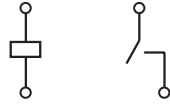


1 Form C (3.2mm Pinning)

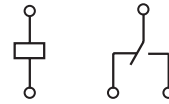


Wiring Diagram (Bottom view)

1 Form A

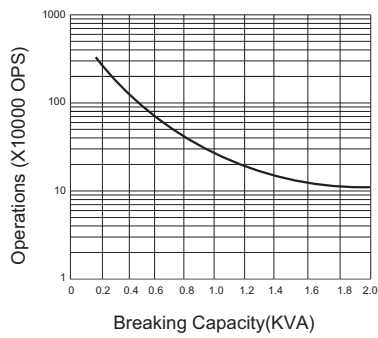


1 Form C

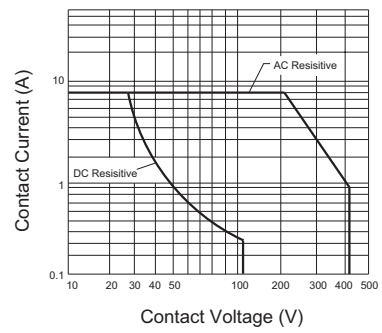


CHARACTERISTIC CURVES

LIFE CURVE



MAXIMUM SWITCHING POWER



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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