HF14FF (JQX-14FF) MINIATURE HIGH POWER RELAY

c UL us
File No.:E134517

File No.:R50055983

CQC
File No.:CQC02001001955

Features

- 10A switching capability
- 5kV dielectric strength (between coil and contacts)
- Sockets available
- Wash tight and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (29.0 x 13.0 x 26.0) mm

CONTACT DATA

Contact arrangement	1A, 1C
Contact resistance	50mΩ (at 1A 24VDC)
Contact material	$AgSnO_2$, AgCdO
Contact rating	TV-5 120VAC Resistive: 10A 277VAC/30VDC
Max. switching voltage	277VAC / 30VDC
Max. switching current	10A
Max. switching power	2770VAC / 300W
Mechanical endurance	1 x 10^7OPS
Electrical endurance	1 x 10^5OPS 1)

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)		15ms max.
Release time (at nomi. volt.)		5ms max.
Vibration resistance		10Hz to 55Hz 1.5mm DA
Shock resistance	Functional	100m/s^2 (10g)
	Destructive	1000m/s^2 (100g)
Humidity		98% RH, 40°C
Ambient temperature		-40°C to 70°C
Termination		PCB
Unit weight		Approx. 18g
Construction		Wash tight, Flux proofed

Notes: 1) If more details about testing method are required, please contact us.
2) The data shown above are initial values.
3) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power	Approx. 530mW

COIL DATA at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.25	0.3	4.2	17 x (1±10%)
5	3.75	0.5	7.0	47 x (1±10%)
6	4.50	0.6	8.4	68 x (1±10%)
9	6.75	0.9	12.6	160 x (1±10%)
12	9.00	1.2	16.8	275 x (1±10%)
18	13.5	1.8	25.2	620 x (1±10%)
24	18.0	2.4	33.6	1100 x (1±10%)
48	36.0	4.8	67.2	4170 x (1±10%)
60	45.0	6.0	84.0	7000 x (1±10%)

Notes: When requiring pick-up voltage < 75% of nominal voltage, special order allowed.

SAFETY APPROVAL RATINGS

UL&CUR	10A 277VAC 10A 30VDC 1/3HP 250VAC 1/4HP 125VAC TV-5 120VAC
TÜV	10A 250VAC 10A 30VDC

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

查询"HF14FF/048-1HTXXX"供应商

ORDERING INFORMATION

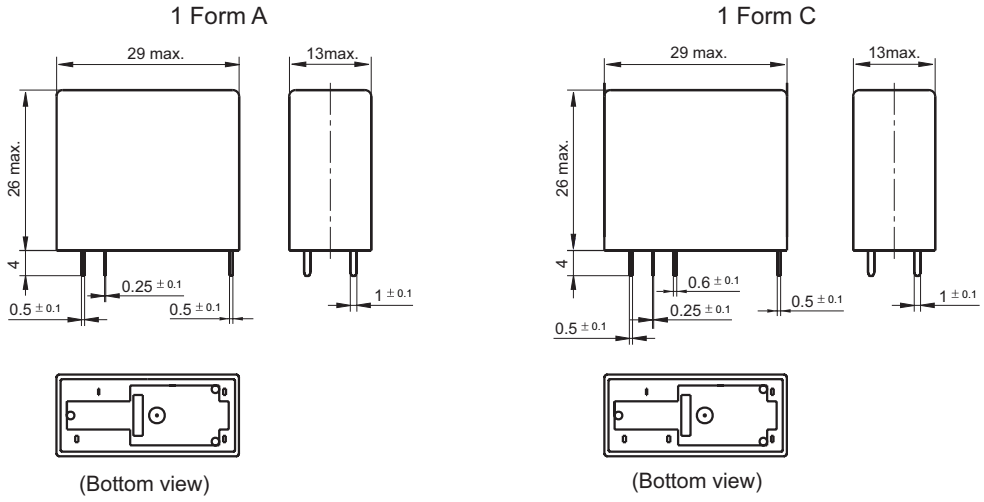
	HF14FF /	012	-1H	S	T	F	(XXX)	
Type [1]	HF14FF JQX-14FF (Old type)							
Coil voltage	3, 5, 6, 9, 12, 18, 24, 48, 60VDC							
Contact arrangement	**1H:** 1 Form A	**1Z:** 1 Form C						
Construction [2]	**S:** Wash tight	**Nil:** Flux proofed						
Contact material	**T:** $AgSnO_2$	**Nil:** AgCdO						
Insulation standard	**F:** Class F	**Nil:** Class B						
Customer special code [3] (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) Under the ambience with dangerous gas like H_2S, SO_2 or NO_2, wash tight type is recommended; please test the relay in real applications. If the ambience allows, flux proofed is preferentially recommended.
3) HF14FF 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.
4) Standard type is with black cover.Smoke dust cover is available.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions



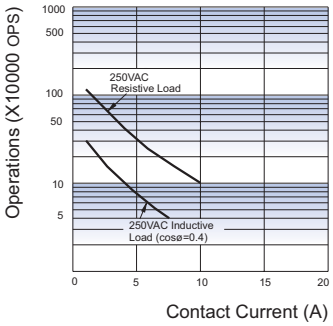
Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)

Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.
2) The tolerance without indicating for PCB layout is always ±0.1mm.
3) The width of the gridding is 2.5mm.

CHARACTERISTIC CURVES

ENDURANCE CURVE



COIL TEMPERATURE RISE