HF41F

SUBMINIATURE POWER RELAY



File No.: E133481



File No.: 40020043



File No.: CQC09002035072



Features

- Slim size (width 5mm)
- High breakdowm voltage 4kV (between coil and contacts)
- Surge voltage up to 6kV (between coil and contacts)
- Meeting VDE 0700, 0631 reinforce insulation
- High sensitive: Approx.170mW
- Sockets available
- 1 Form A and 1 Form C configurations
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (28.0 x 5.0 x 15.0) mm

CONTACT DATA

Contact arrangement	1A, 1C	
Contact resistance	No gold plated:100mΩ max. (at 1A 6VDC) Gold plated: 30mΩ max. (at 1A 6VDC)	
Contact material	AgSnO ₂ , AgNi	
Contact rating (Res. load)	6A 250VAC/30VDC	
Max. switching voltage	400VAC / 125VDC	
Max. switching current	6A	
Max. switching power	1500VA / 180W	
Mechanical endurance	1 x 10 ⁷ ops	
Electrical endurance	H type: 6 x 10 ⁴ ops (6A 250VAC/30VDC,	
	Resistive load, AgNi, at 85°C, 1s on 9s off) Z type: 3 x 10 ⁴ ops (NO, 6A 250VAC/30VDC,	
	Resistive load, AgNi, at 85°C, 1s on 9s off)	
	1 x 10 ⁴ OPS (NC, 6A 250 VAC/30 VDC,	
	Resistive load, AgNi, at 85°C, 1s on 9s off)	

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts		4000VAC 1 min
	Between open contacts		1000VAC 1 min
Operate time (at nomi.volt.)		8ms max.	
Release time (at nomi.volt.)		4ms max.	
Shock resistance	istance	Functional	49m/s ²
SHOCK resistance		Destructive	980m/s ²
Vibration resistance		10Hz to 55Hz 1mm DA	
Humidity		5% to 85% RH	
Ambient temperature		-40°C to 85°C	
Termination		PCB	
Unit weight		Approx. 5g	
Construction		Plastic sealed, Flux proofed	

- Notes: 1) The data shown above are initial values.
 - 2) Please find coil temperature curve in the characteristic curves below.
 - 3) Please do not install a SPDT(1 Form C) type relay on either of the smallest sides or facing downward.
 - 4) UL insulation system: Class A

COIL	
Coil power	5VDC to 24VDC: Approx. 170mW
	48VDC, 60VDC: Approx. 210mW

COIL DATA

at 23°C

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Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Voltage VDC ²⁾	Coil Resistance Ω
5	3.75	0.25	7.5	147 x (1±10%)
6	4.50	0.30	9.0	212 x (1±10%)
9	6.75	0.45	13.5	476 x (1±10%)
12	9.00	0.60	18	848 x (1±10%)
18	13.5	0.90	27	1906 x (1±15%)
24	18.0	1.20	36	3390 x (1±15%)
48 ³⁾	36.0	2.40	72	10600 x (1±15%)
60 ³⁾	45.0	3.00	90	16600 x (1±15%)

Notes: 1) When require pick-up voltage ≤ 70% nominal voltage, special order allowed.

- 2) Maximum voltage refers to the maximum voltage which relay coil could endure in a short period of time.
- 3) For products with rated voltage ≥ 48V, measures should be taken to prevent coil overvoltage in order to protect coil in test and application (eg. Connect diodes in parallel).

SAFETY APPROVAL RATINGS

6A 30VDC at 85°C		
6A 277VAC at 85°C		
R300		
B300		
6A 30VDC at 85°C		
6A 250VAC at 85°C		

Notes: 1) All values unspecified are at room temperature.

2) Only typical loads are listed above. Other load specifications can be available upon request.



HONGFA RELAY ISO9001, ISO/TS16949 , ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

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