

HF32FA-G

SUBMINIATURE INTERMEDIATE POWER RELAY



File No.:E134517



File No.:40006182



File No.:CQC09002028689



Features

- 10A switching capability
- Creepage/clearance distance>8mm
- 5kV dielectric strength (between coil and contacts)
- 1 Form A meets VDE 0700, 0631 reinforce insulation
- Product in accordance to IEC 60335-1 available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (17.6 x 10.1 x 12.3) mm

CONTACT DATA

Contact arrangement	1A
Contact resistance	70mΩ (at 1A 6VDC)
Contact material	AgSnO ₂
Contact rating (Res. Load)	10A 250VAC
Max. switching voltage	250VAC
Max. switching current	10A
Max. switching power	2500VA
Mechanical endurance	1 x 10 ⁶ OPS
Electrical endurance	1 x 10 ⁴ OPS

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	5000VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)	8ms max.	
Release time (at nomi. volt.)	4ms max.	
Humidity	35% to 95% RH	
Ambient temperature	-40°C to 85°C	
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance	10Hz to 55 Hz 1.65mm DA	
Termination	PCB	
Unit weight	Approx.4.6g	
Construction	Plastic sealed, Flux proofed	

- Notes:** 1) The vibration resistance should be 0.6mm,10Hz to 55Hz for NC contact. Along with the length direction.
 2) The data shown above are initial values.
 3) Please find coil temperature curve in the characteristic curves below.

COIL

Coil power	Standard: 450mW; Sensitive: 230mW
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COIL DATA

at 23°C

Standard type (450mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.25	0.15	3.9	20 x (1±10%)
5	3.75	0.25	6.5	55 x (1±10%)
6	4.50	0.30	7.8	80 x (1±10%)
9	6.75	0.45	11.7	180 x (1±10%)
12	9.00	0.60	15.6	320 x (1±10%)
18	13.5	0.90	23.4	720 x (1±10%)
24	18.0	1.20	31.2	1280 x (1±10%)
48	36.0	2.40	62.4	5120 x (1±10%)

Sensitive type (230mW)

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.25	0.15	5.1	38 x (1±10%)
5	3.75	0.25	8.5	108 x (1±10%)
6	4.50	0.30	10.2	155 x (1±10%)
9	6.75	0.45	15.3	350 x (1±10%)
12	9.00	0.60	20.4	620 x (1±10%)
18	13.5	0.90	30.6	1390 x (1±10%)
24	18.0	1.20	40.8	2480 x (1±10%)
48	36.0	2.40	81.6	9920 x (1±10%)

SAFETY APPROVAL RATINGS

UL/CUL	10A 250VAC at 85°C
	15A 120VAC at 70°C
	B300 at 40°C
VDE	10A 250VAC at 85°C

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



HONGFA RELAY

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

2010 Rev. 1.00

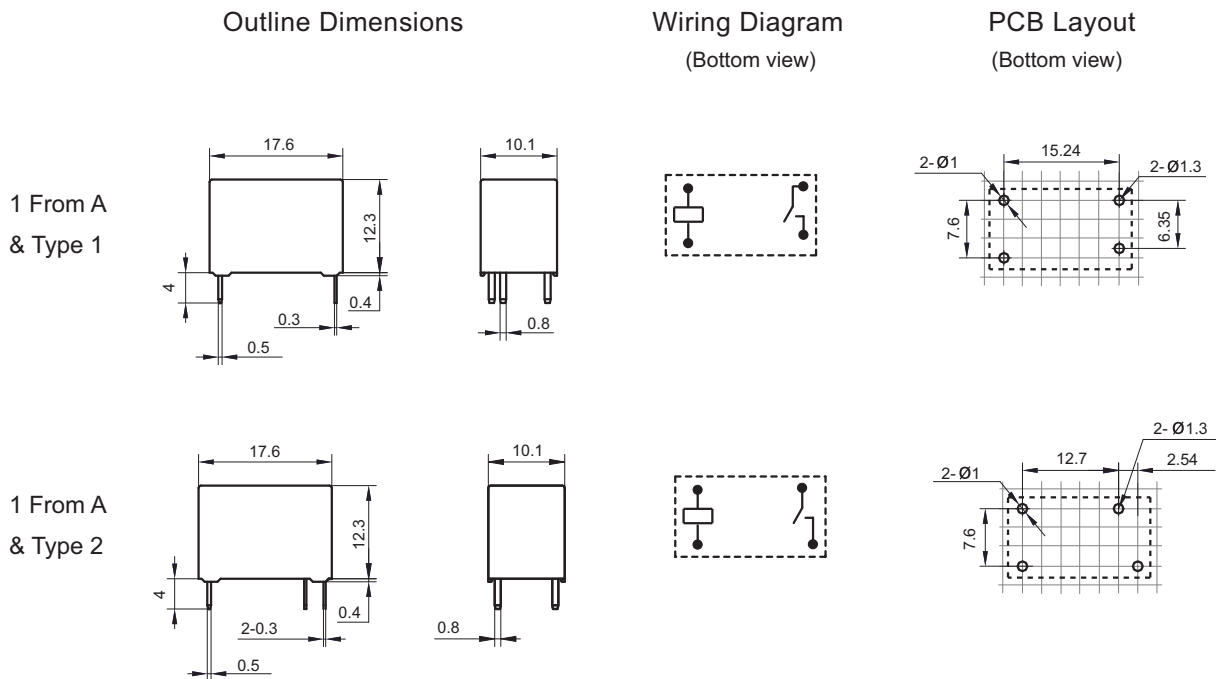
ORDERING INFORMATION

Type		HF32FA-G / 012 -H S L 1 (XXX)					
Coil voltage	3, 5, 6, 9, 12, 18, 24, 48VDC						
Contact arrangement	H: 1 Form A						
Construction ¹⁾	S: Plastic sealed		Nil: Flux proofed				
Coil power	L: Sensitive		Nil: Standard				
Termination	1: Type 1		2: Type 2				
Customer special code	e.g. (335) stands for product in accordance to IEC 60335-1 (GWT)						

Notes: 1) Under the ambience with dangerous gas like H₂S, SO₂ or NO₂, plastic sealed type is recommended; Please test the relay in real applications. If the ambience allows, flux proofed type is preferentially recommended.
If water cleaning is required after the relay is assembled on PCB, please contact us for suggestion about suitable parts.

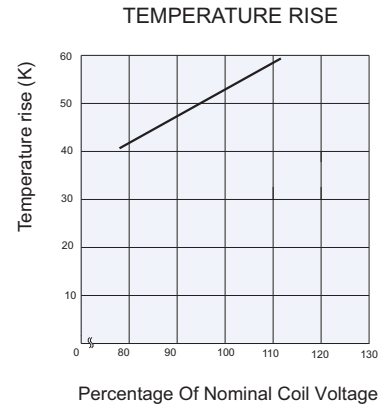
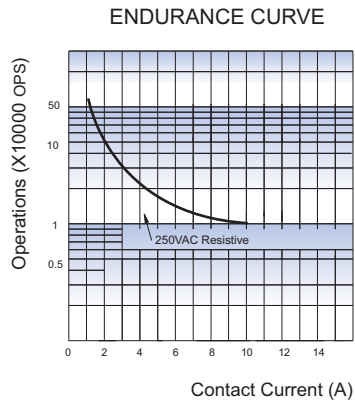
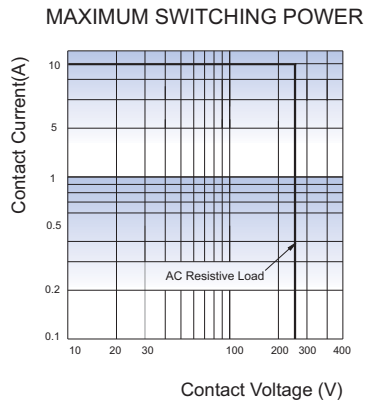
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm



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



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.