





HF32FA-T

SUBMINIATURE INTERMEDIATE
HIGH TEMPERATURE POWER RELAY


File No.:E134517


File No.:40006182


File No.:CQC09002028689



Features

- High temperature: 105°C
- 5A switching capability
- 1 Form A configuration
- Creepage/clearance distance>8mm
- 5kV dielectric strength (between coil and contacts)
- UL insulation system: Class F
- Meeting 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 max.(at 1A 6VDC)
Contact material	AgNi
Contact rating (Res. load)	5A 250VAC 5A 30VDC
Max. switching voltage	250VAC/30VDC
Max. switching current	5A
Max. switching power	1250VA/150W
Mechanical endurance	1 x 10 ⁶ OPS
Electrical endurance	1 x 10 ⁵ 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		5% to 85% RH
Ambient temperature		-40°C to 105°C
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance		10Hz to 55Hz 1.65mm DA
Termination		PCB
Unit weight		Approx.4.6g
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.

COIL

Coil power	Sensitive: Approx. 200mW
------------	--------------------------

COIL DATA

at 23°C

Sensitive type				
Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. Allowable Voltage VDC	Coil Resistance Ω
3	2.25	0.15	5.1	45 x (1±10%)
5	3.75	0.25	8.5	125 x (1±10%)
6	4.50	0.30	10.2	180 x (1±10%)
9	6.75	0.45	15.3	400 x (1±10%)
12	9.00	0.60	20.4	720 x (1±10%)
18	13.5	0.90	30.6	1600 x (1±10%)
24	18.0	1.20	40.8	2800 x (1±10%)

SAFETY APPROVAL RATINGS

UL/CUL	5A 250VAC at 105°C
VDE	5A 250VAC at 105°C 3A 400VAC at 105°C

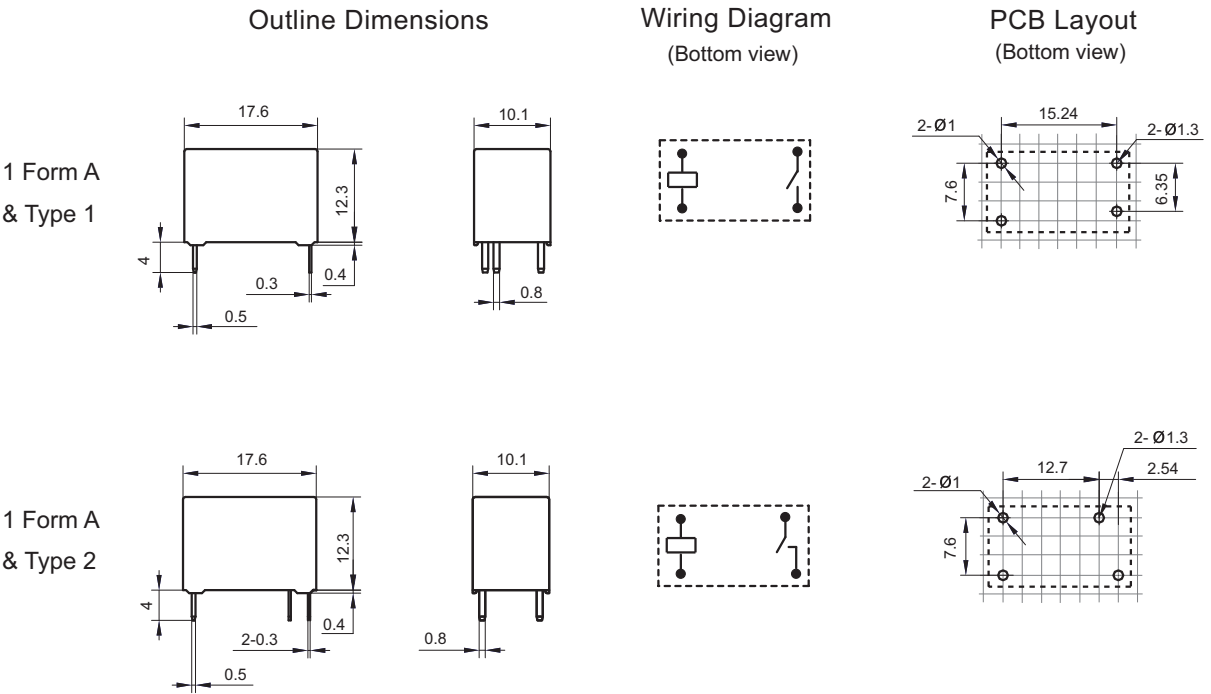
Notes: Only some typical ratings are listed above. If more details are required, please contact us.

ORDERING INFORMATION				
	HF32FA-T / 012 -H S L 1 G (XXX)			
Type				
Coil voltage	3, 5, 6, 9, 12, 18, 24VDC			
Contact arrangement	H: 1 Form A			
Construction ¹⁾	S: Plastic sealed		Nil: Flux proofed	
Coil power	L: Sensitive			
Termination	1: Type 1		2: Type 2	
Contact plating ²⁾	G: Gold plated		Nil: No gold plated	
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.
2) For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC.

OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

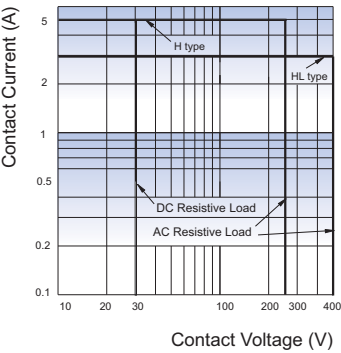
Unit: mm



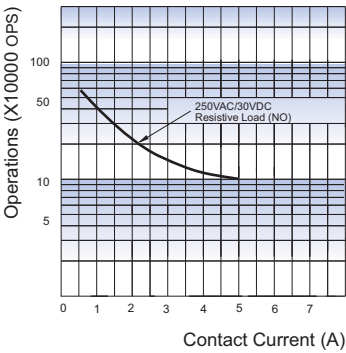
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.
2) The tolerance without indicating for PCB layout is always ±0.1mm.
3) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES

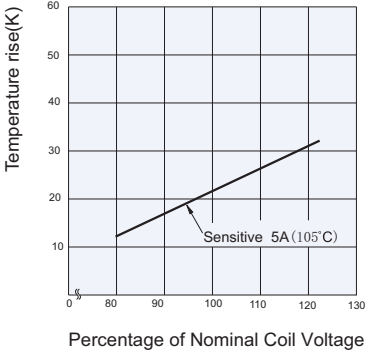
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



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.

© Xiamen Hongfa Electroacoustic Co., Ltd. All rights of Hongfa are reserved.