

**HF32FA-T (JZC-32FA-T)****SUBMINIATURE INTERMEDIATE POWER HIGH TEMPERATURE RELAY**

File No.:E134517



File No.:40006182

**Features**

- High temperature: 105°C
- 5A switching capability
- 1 Form A configuration
- Creepage/clearance distance>8mm
- 5kV dielectric strength (between coil and contacts)
- Meets VDE 0700, 0631 reinforce insulation
- 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 24VDC)
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 <sup>6</sup> OPS
Electrical endurance	1 x 10 <sup>5</sup> OPS

**COIL**

Coil power	Sensitive: 200mW
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**COIL DATA**

Sensitive Type				
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	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%)

**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 105°C
Shock resistance	Functional 100m/s <sup>2</sup> (10g) Destructive 1000m/s <sup>2</sup> (100g)
Vibration resistance	10Hz to 55Hz 1.65mm DA
Termination	PCB
Unit weight	Approx.4.6g
Construction	Wash tight, Flux proofed

Notes: 1) The data shown above are initial values.

2) Please find coil temperature curve in the characteristic curves below.

**SAFETY APPROVAL RATINGS**

UL&CUR	5A 250VAC at 105°C
VDE	5A 250VAC at 105°C 3A 400VAC at 85°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 <sup>1)</sup>	HF32FA-T JZC-32FA-T (Old type)							
Coil voltage	3, 5, 6, 9, 12, 18, 24VDC							
Contact arrangement	H: 1 Form A							
Construction <sup>2)</sup>	S: Wash tight      Nil: Flux proofed							
Coil power	L: Sensitive							
Termination	1: Type 1      2: Type 2							
Contact plated <sup>3)</sup>	G: Gold plated      Nil: No gold plated							
Customer special code <sup>4)</sup>	Only for special requirements, e.g. (555) stands for RoHS compliant							

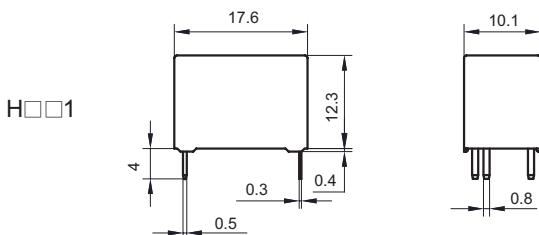
**Notes:**

- 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<sub>2</sub>S, SO<sub>2</sub> or NO<sub>2</sub>, wash tight type is recommended; please test the relay in real applications. If the ambience allows, flux proofed is preferentially recommended.
- 3) For gold plated type, the min. switching current and min. switching voltage is 10mA 5VDC.
- 2) HF32FA-T is an environmental friendly product. Please mark a special code (555) when ordering.

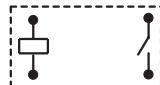
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

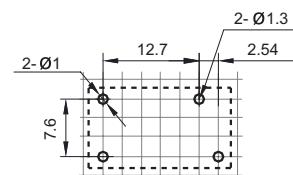
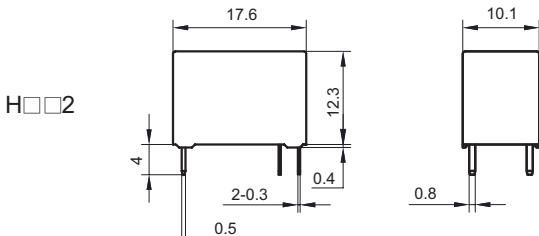
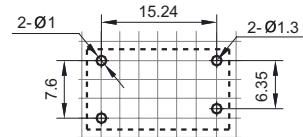
Outline Dimensions



Wiring Diagram  
(Bottom view)



PCB Layout  
(Bottom view)

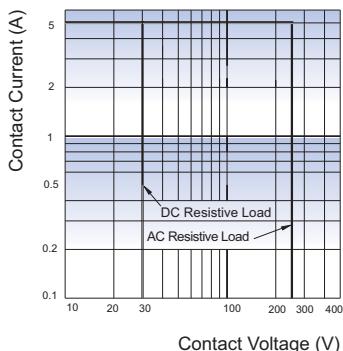


**Remark:**

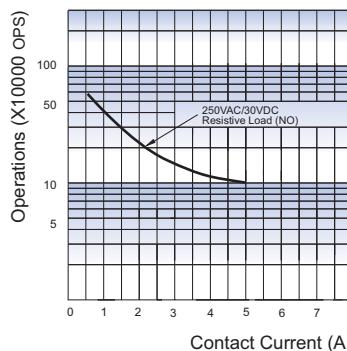
- 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.
- 2) The tolerance without indicating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

## CHARACTERISTIC CURVES

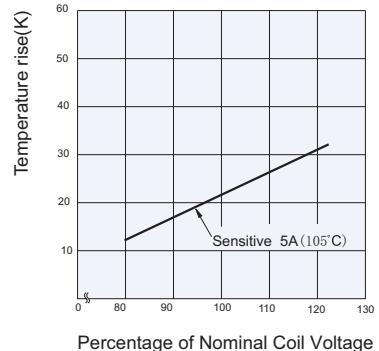
MAXIMUM SWITCHING POWER



EDURANCE 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.