

# JZC-7FF

# SUBMINIATURE HIGH POWER RELAY


  
 File No:E319069



File No:08001024148



## Features

- 10A switching capability
- 1Form A and 1Form C configurations
- Plastic sealed and flux proofed types available
- UL insulation system:Class F available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions:(22.5 x 16.5 x 16.5)mm

## CONTACT DATA

Contact arrangement	1A,1C
Contact resistance	100mΩ max.(at 1A 6VDC)
Contact material	AgSnO <sub>2</sub> ,AgCe
Contact rating	5A 250VAC/30VDC
(Res.load)	10A 250VAC/28VDC
Max. switching voltage	250VAC/30VDC
Max. switching current	10A
Max. switching power	2400VA/280W
Mechanical endurance	1 x 10 <sup>7</sup> OPS
Electrical endurance	1HT,1ZT type:1 x 10 <sup>4</sup> OPS(10A 250VAC, Resistive load,Room temp,1s on 9s off) 1H,1Z type:1 x 10 <sup>4</sup> OPS(5A 250VAC Resistive load,Room temp,1s on 9s off)

## COIL DATA

Nominal Voltage VDC	Pick-up Voltage VDC max.	Dorp-out Voltage VDC min.	Max. Voltage VDC*	Coil Resistance Ω
3	2.40	0.3	3.6	25 x (1±10%)
5	4.00	0.5	6.0	70 x (1±10%)
6	4.80	0.6	7.2	100 x (1±10%)
9	7.20	0.9	10.8	225 x (1±10%)
12	9.60	1.2	14.4	400 x (1±10%)
18	14.4	1.8	21.6	900 x (1±10%)
24	19.2	2.4	28.8	1600 x (1±10%)
48	38.4	4.8	57.6	4500 x (1±10%)

**Notes:** 1)\*Maximum Voltage refers to the maximum voltage which relay coil could endure in a short period of time.

## CHARACTERISTICS

Insulation resistance	100MΩ (at 500VDC)	
Dielectirc strength	Between coil&contacts	1500VAC 1min
	Between open contacts	750VAC 1min
Operate time(at nomi. volt.)	10ms max.	
Release time(at nomi. volt.)	5ms max.	
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40℃ to 70℃	
Termination	PCB	
Unit weight	Approx.9.5g	
Construction	Plastic sealed, Flux proofed	

**Notes:** 1)The data shown above are intial values.  
2)Please find coil temperature curve in the characteristic curves below.  
3)UL insulation system:Class F,Class B,Class A.

## COIL

Coil power	5VDC to 24VDC:Approx.360mW
	48VDC:Approx.510mW

## SAFETY APPROVAL RATINGS

UL/CUL (AgCe)	1 Form A	10A 277VAC 6A 30VDC
	1 Form C	NO:10A 277VAC NO/NC:5A 277VDC NO:5A 30VDC NC:2FLA 4LRA 120VAC
UL/CUL (AgSnO <sub>2</sub> )	1 Form A	12A 277VAC 12A 28VDC
	1 Form C	12A 277VAC 12A 28VDC

**Notes:** 1)All values unspecified are at room temperature.  
2)Only typical loads are listed above.Other load specifications can be available upon request.



JINTIAN RELAY  
ISO9001

2018 Rev.1.00

## ORDERING INFORMATION

**JT7FF / 012 -1H T S F (XXX)**

### Type

**Coil voltage** 3,5,6,9,12,18,24,48VDC

**Contact arrangement** **H**:1FormA **Z**:1Form C

**Contact material** **T**:AgSnO<sub>2</sub>(10A) **Nil**:AgCe(5A)

**Construction**<sup>1)2)</sup> **S**:Plastic sealed **Nil**:Flux proofed

**Insulation standard** **F**:Class F **B**: Class B **Nil**: Class A

**Special code**<sup>3)</sup> **XXX**:Customer special requirement **Nil**:Standrad

**Notes:** 1) We recommend flux proofed types for a clean environment(free from contaminations like H<sub>2</sub>S,SO<sub>2</sub>,NO<sub>2</sub>,dust,etc.). We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H<sub>2</sub>S,SO<sub>2</sub>,NO<sub>2</sub>,dust,etc.).

2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB.

3) The customer special requirement express as special code after evaluating by JINTIAN.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

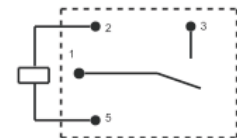
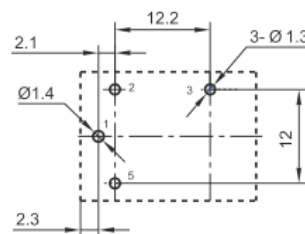
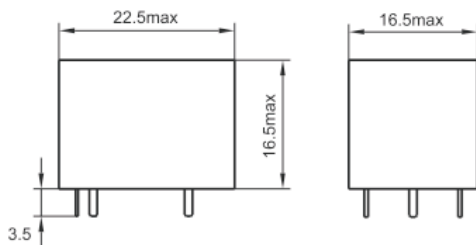
Unit: mm

### Outline Dimensions

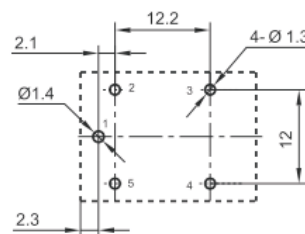
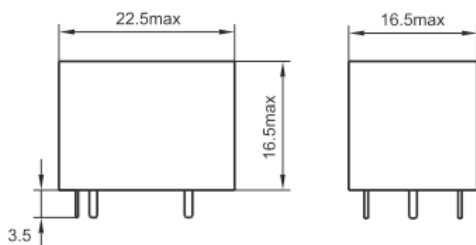
### PCB Layout (Bottom view)

### Wiring Diagram (Bottom view)

#### 1 Form A



#### 1 Form C

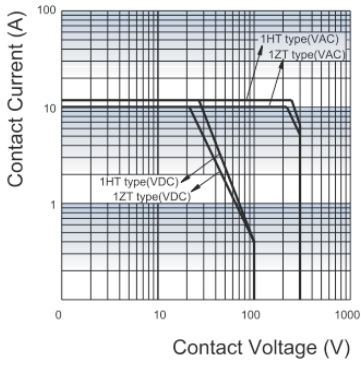


Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.

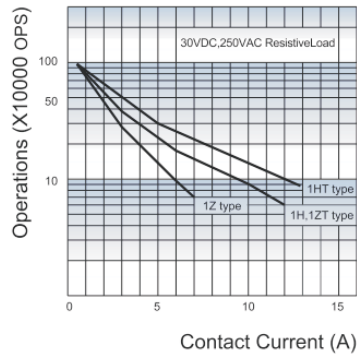
2) The tolerance without indicating for PCB layout is always  $\pm 0.1$ mm.

# CHARACTERISTIC CURVES

MAXIMUM SWITCHING POWER



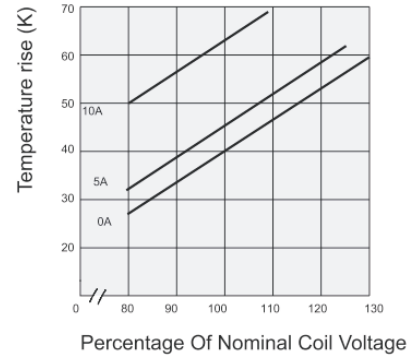
ENDURANCE CURVE



**Test conditions:**

NO, Resistive load, Flux proofed,  
Room temp., 1s on 9s off.

COIL TEMPERATURE RISE



**Disclaimer**

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications 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 JINTIAN for the technical service. However, it is the user's responsibility to determine which product should be used only.