## JT46F

## SUBMINIATURE HIGH POWER RELAY





认证号:R 50459402

CQC \证号:CQC20002238016

### CONTACT DATA

Contact arrangement	1A
Contact resistance <sup>1)</sup>	100mΩ max.(at 1A 6VDC)
Contact material	AgSnO <sub>2</sub>
Contact rating (Res.load)	3A 250VAC/30VDC 5A 250VAC/30VDC
Max.switching voltage	277VAC/30VDC
Max.switching current	5A
Max.switching power	1385VA/150W
Mechanical endurance	1 x 10 <sup>€</sup> ops
Electrical endurance	1 x 10⁵ops (5A 250VAC,Resistive load, AgSnO₂,at 105°C, 1s on 1s off)

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

#### CHARACTERISTICS

Insulation resistance			1000MΩ(at 500VDC)			
Dielectirc	Between coil&contacts		4000VAC 1mi			
strength	Between open contacts		1000VAC 1mi			
Surge voltage (between coil & movable contacts)		10kV(1.2/50 μs				
Operate time(at nomi.volt.)		10ms max				
Release time(at nomi.volt.)			10ms max.			
Shock resistance		Functional	98m/s²			
		Destructive	980m/s <sup>2</sup>			
Vibration resistance		10Hz to 55Hz 1.5mm DA				
Humidity		5% to 85% RH				
Ambient tenperature		-40°C to105°C				
Termination		PCB				
Unit weight		Approx. 3				
Construction		Plastic sealed Dust protecte				

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

#### Features

- 5A switching capability
- 10kV impulse withstand voltage(between coil and contacts)
- Meets VDE 0631 reinforce insulation
- Highly efficient magnetic circuit for high sensiticity:200mW
  Extremely small footprint utilizing PCB area
- Extremely small tootprint utilizing PCB
   UL insulation system:Class F available
- Environmental friendly product (ROSH compliant)
- Outline Dimensions: (20.5 x 7.2 x 15.0)mm

## COIL

Approx. 200mW

#### **COIL DATA** at 23°C Pick-up Drop-out Max. Nominal Coil Voltage VDC<sup>1)</sup> Voltage VDC<sup>1)</sup> Voltage VDC\*2) Resistance Ω Voltage VDC 7.50 5 ≤3 75 ≥0.25 125 x (1±10%) 6 ≤4.50 ≥0.30 9.00 180 x (1±10%) 9 ≤6.75 ≥0.45 13.5 $405 \times (1 \pm 10\%)$ 12 ≪9.00 ≥0.60 18.0 720 x (1±10%) 18 ≤13.5 ≥0.90 27.0 1620 x (1±10%) 24 ≤18.0 ≥1.20 36.0 2880 x (1±10%)

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

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

安全认证	E
TUV/CQC	3A/5A 277VAC 105°C 3A/5A 250VAC 105°C 3A/5A 125VAC 105°C 3A/5A 30VDC 105°C
UL	3A/5A 277VAC 105°C 3A/5A 250VAC 105°C 3A/5A 125VAC 105°C 3A/5A 30VDC 105°C 3A/5A 30VDC 105°C 1/10HP 277VAC 85°C

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



#### **ORDERING INFORMATION**

	JT46F	012 -	Н	S	1	Т	F	(XXX)
Туре								× ,
Coil voltage	9	5,6,9,12,18,24VDC						
Contact arr	angement	H:1From A						
Construct	<b>ion</b> <sup>1)2)</sup>	S: Plastic sealed Nil: Dust protected						
Terminatio	on	<b>1</b> : type1						
Contact m	aterial	T: AgSnO <sub>2</sub>						
Insulation s	standard	F: Class F						
Special code <sup>3)</sup> XXX: Customer special requirement Nil: Standrad								

Notes:1) 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. e.g. (335) stands for product in accordance to

Í IEC 60335-1(GWT).

JT46F/DD-HS1TF(XXX)

#### OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm



**PCB** Layout

(Bottom view)

Æ

11.5

(1.05)

#### **Outline Dimensions**

\_\_\_\_\_\_0.8

7.2

Wiring Diagram (Bottom view)



# Remark:1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual producet.

4-Ø1.1

- 2) 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.
- 3) The tolerance without indicating for PCB layout is always  $\pm 0.1 \text{mm}.$

#### CHARACTERISTIC CURVES





**Test conditions:** AgSnO<sub>2</sub>, at 105°C, 1s on 1s off

#### COIL TEMPERATURE RISE



**Test conditions:** 5A 105°C Mounting distance: 5mm

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.

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