

# JT84F

# SUBMINIATURE HIGH POWER RELAY

**CU** US  
File No:E319069



## Features

- 16A switching capability
- 2.5kV dielectric strength
- (between coil and contacts)
- Panel mount types available
- Environmental friendly product
- (RoHS compliant)
- Outline Dimensions:(47.0 x 32.0 x 28.5)mm

## CONTACT DATA

Contact arrangement	1A, 1B, 1C	
Contact resistance	50mΩ max.(at 1A 24VDC)	
Contact material	AgCe	
Contact rating (Res.load)	1A,1C	1B
	16A 250VAC Resistive load	8A 250VAC General load
Max.switching current	16A	
Max.switching power	4000VAC	
Max.switching voltage	250VAC	
Mechanical endurance	1 x 10 <sup>6</sup> OPS	
Electrical endurance	7 type:3 x 10 <sup>4</sup> OPS(8A 250VAC, General use,at 40°C,1s on 9s off) 1,4 type:1 x 10 <sup>5</sup> OPS(16A 250VAC, Resistive load,at 65°C,1s on 9s off)	

## CHARACTERISTICS

Insulation resistance	500MΩ (at 500VDC)	
Dielectric strength	Between coil&contacts	2500VAC 1min
	Between open contacts	1000VAC 1min
Operate time(at nomi.volt.)	DC type:25ms max.	
Release time(at nomi.volt.)	DC type:25ms max.	
Temperature rise(at nomi.volt.)	90K max.	
Shock resistance(Functional)	147m/s <sup>2</sup> 11ms	
Vibration resistance	10Hz to 55Hz 2.54mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40°C to 65°C	
Termination	QC	
Unit weight	Approx.75g	
Construction	Dust protected	

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

## COIL

Coil power	DC type:2.1W; AC type:3.5VA
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## COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC max.	Dorp-out Voltage VDC min.	Max. Voltage VDC*	Coil Resistance Ω
6	4.50	0.6	6.6	17.5 x (1±10%)
9	6.75	0.9	9.9	40 x (1±10%)
12	9.00	1.2	13.2	70 x (1±10%)
24	18.0	2.4	26.4	280 x (1±10%)
48	36.0	4.8	52.8	1120 x (1±10%)
120	90.0	12.0	132	7000 x (1±10%)

Nominal Voltage VDC	Pick-up Voltage VDC max.	Dorp-out Voltage VDC min.	Max. Voltage VDC*	Coil Resistance Ω
6	5.1	1.2	6.6	4.8 x (1±10%)
12	10.2	2.4	13.2	19 x (1±10%)
24	20.4	4.8	26.4	90 x (1±10%)
48	40.6	9.6	52.8	300 x (1±10%)
120	102	24	132	2000 x (1±10%)
240	204	48	264	7200 x (1±10%)
277	235	55.4	304.7	11000 x (1±10%)

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

## SAFETY APPROVAL RATINGS

UL/CUL (AC type)	JT84F-1	8FLA,25LRA 250VAC 16A 250VAC 8A 250VAC
	JT84F-4	8FLA,25LRA 250VAC 16A 250VAC 8A 250VAC
	JT84F-7	8FLA,25LRA 250VAC 8A 250VAC

**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

**JT84F / -1 A 24 (XXX)**

Type

Contact arrangement 1:1 Form C 4:1 Form A 7:1 Form B

Contact arrangement D:DC A:AC

Coil voltage AC:6VAC to 277VAC DC:6VDC to 120VDC

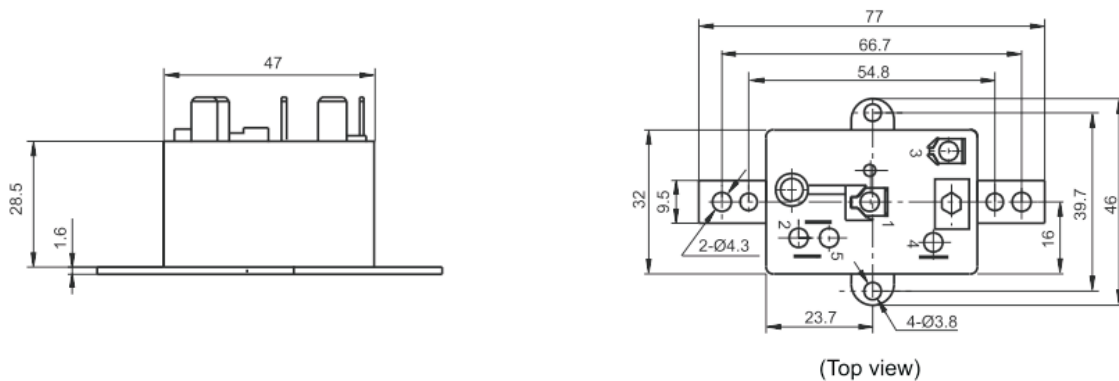
Special code<sup>3)</sup> XXX:Customer special requirement Nil:Standrad

Notes: 1) The customer special requirement express as special code after evaluating by JINTIAN.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

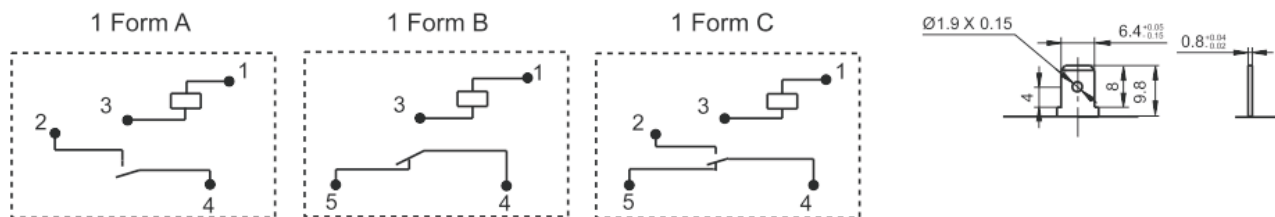
Unit: mm

Outline Dimensions



Wiring Diagram  
(Top view)

Terminals type



Remark: 1) \*The additional tin top is max. 1mm.

2) 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.

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

### 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.