

# JT 32F

# SUBMINIATURE INTERMEDIATE POWER RELAY



File No.: E319069



File No.: R 50134939



File No.: CQC08001026665



## Features

- 10A switching capability
- 1 Form A and 1 Form C configurations
- Subminiature, standard PCB layout
- Plastic sealed and flux proofed types available
- Class F insulation system
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (18.4 x 10.2 x 15.3) mm

## CONTACT DATA

Contact arrangement	1A, 1C		
Contact resistance	100mΩ max. (at 1A 6VDC)		
Contact material	AgNi, AgCdO		
Contact rating (Res. load)	1A		1C
	Standard	Sensitive	Standard
	H: 5A 250VAC 5A 30VDC 10A 125VAC	HL: 3A 250VAC 3A 30VDC HLQ: 8A 250VAC	3A 250VAC 3A 30VDC
			3A 30VDC
Max. switching voltage	250VAC / 30VDC		
Max. switching current	10A		
Max. switching power	1250VA / 150W		
Mechanical endurance	1 x 10 <sup>7</sup> OPS		
Electrical endurance	1 x 10 <sup>6</sup> OPS		

## CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectric strength	Between coil & contacts	2500VAC 1min
	Between open contacts	1000VAC 1min
Operate time (at nomi. volt.)	8ms max.	
Release time (at nomi. volt.)	5ms max.	
Humidity	35% to 95% RH	
Ambient temperature	Standard	-40°C to 70°C
	High capacity	-40°C to 70°C
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Termination	PCB	
Unit weight	Approx. 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.  
 3) In order to obtain better electrical endurance, it's better not use this product in the high temperature environment.

## COIL

Coil power	Standard: Approx. 450mW; Sensitive: Approx.200mW
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## COIL DATA

at 23°C

### Standard 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	3.9	20 x (1±10%)
5	3.75	0.25	6.5	55 x (1±10%)
6	4.50	0.30	7.8	80 x (1±10%)
9	6.75	0.45	11.7	180 x (1±10%)
12	9.00	0.60	15.6	320 x (1±10%)
18	13.5	0.90	23.4	720 x (1±10%)
24	18.0	1.20	31.2	1280 x (1±10%)
48	36.0	2.40	62.4	5120 x (1±10%)

### Sensitive type (Only for 1 Form A)

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	4.5	45 x (1±10%)
5	3.75	0.25	7.5	125 x (1±10%)
6	4.50	0.30	9.0	180 x (1±10%)
9	6.75	0.45	13.5	400 x (1±10%)
12	9.00	0.60	18.0	720 x (1±10%)
18	13.5	0.90	27.0	1600 x (1±10%)
24	18.0	1.20	36.0	2800 x (1±10%)
48	36.0	2.40	72.0	11520 x (1±10%)



JinTian RELAYS  
ISO9001 CERTIFIED

2009 Rev. 1.01

## SAFETY APPROVAL RATINGS

UL&CUL	1 H	H型: 5A 250VAC /30VDC 70°C 10A 125VAC 70°C
		HL型: 3A 250VAC /30VDC 70°C 5A 125VAC 70°C
	1 Z	3A 250VAC/30VDC 70°C
TÜV	1 H	H型: 5A 250VAC /30VDC 70°C
		HL型: 3A 250VAC /30VDC 70°C
	1 Z	3A 250VAC/30VDC 70°C

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

## ORDERING INFORMATION

JT 32F / 012 -H S L 3 (XXX)	
<b>Type</b>	
<b>Coil voltage</b>	3, 5, 6, 9, 12, 18, 24 VDC
<b>Contact arrangement</b>	H: 1 Form A    Z: 1 Form C
<b>Construction</b> <sup>1)</sup>	S: Plastic sealed    Nil: Flux proofed
<b>Coil Power</b>	L: Sensitive (Only for 1 Form A)    Nil: Standard
<b>Contact material</b>	3: AgNi    Nil: AgCdO
<b>Customer special code</b>	e.g. (335) stands for product in accordance to IEC 60335-1 (GWT)

**Notes:** 1) Under the ambience with dangerous gas like H<sub>2</sub>S, SO<sub>2</sub> or NO<sub>2</sub>, 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.

# OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

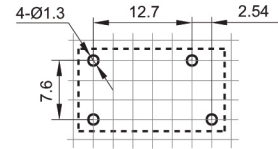
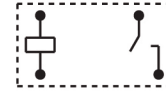
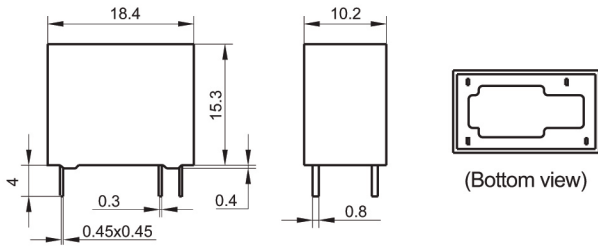
Unit: mm

## Outline Dimensions

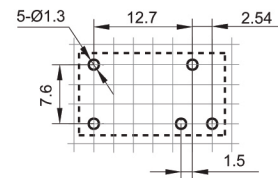
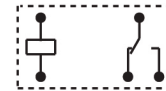
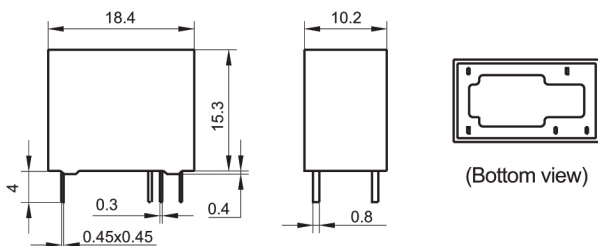
## Wiring Diagram (Bottom view)

## PCB Layout (Bottom view)

### 1 Form A



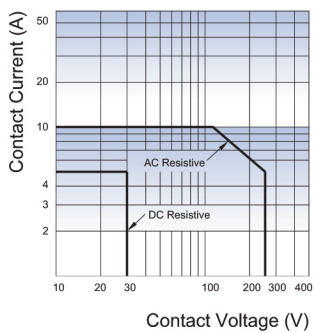
### 1 Form C



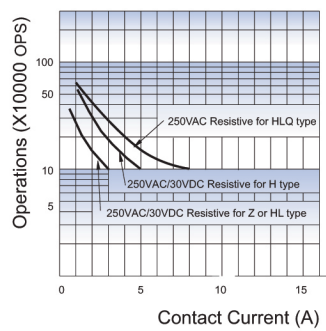
- Remark: 1) In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$ mm, tolerance should be  $\pm 0.2$ mm; outline dimension  $> 1$ mm and  $\leq 5$ mm, tolerance should be  $\pm 0.3$ mm; outline dimension  $> 5$ mm, tolerance should be  $\pm 0.4$ mm.  
 2) The tolerance without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

# CHARACTERISTIC CURVES

## MAXIMUM SWITCHING POWER



## EDURANCE CURVE



## COIL TEMPERATURE RISE

