

# JT152F

# MINIATURE HIGH POWER RELAY



File No:R 50444030



File No:CQC19002225196



## Features

- 17A switching capability
- Surge voltage up to 6kV (between coil and contact)
- Product in accordance to IEC 60335-1 available
- Plastic sealed and flux proofed type available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions:(21.2 x 16.0 x 21.8)mm

## CONTACT DATA

Contact arrangement	1A	1B	1C
Contact resistance <sup>1)</sup>	100mΩ max.(at 1A 24VDC)		
Contact material	AgSnO <sub>2</sub>		
Max.switching voltage	277VAC/30VDC		
Max.switching current	20A	10A	16A
Max.switching capacity	4700VA/510W		
Contact rating (Res.load)	17A 250VAC/30VDC 20A 125VAC		
Mechanical endurance	1 x 10 <sup>7</sup> ops		
Electrical endurance	1 x 10 <sup>5</sup> ops		

**Notes:** 1) The data shown above are initial values.  
2) For plastic sealed type, the venting-hole should be opened in electrical endurance test.

## CHARACTERISTICS

Insulation resistance	100MΩ 500VDC	
Dielectric strength	Between coil & contacts	2500VAC 1min
	Between open contacts	1000VAC 1min
Surge voltage(Between coil & contacts)	6KV (1.2/50 μs)	
Operate time(at nomi.volt.)	10ms max.	
Release time(at nomi.volt.)	5ms max.	
Ambient temperature	-40°C to 105°C	
Shock resistance	Functional	98m/s <sup>2</sup>
	Destructive	980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	5% ~ 85% RH	
Unit weight	Approx. 15g	
Construction	Plastic sealed Flux proofed	

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

## COIL

Coil power	Approx. 360mW
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## COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC <sup>1)</sup>	Drop-out Voltage VDC <sup>1)</sup>	Max. Voltage VDC <sup>*2)</sup>	Coil Resistance Ω
3	≤2.25	≥0.15	3.9	25 x (1±10%)
5	≤3.75	≥0.25	6.5	70 x (1±10%)
6	≤4.50	≥0.30	7.8	100 x (1±10%)
9	≤6.75	≥0.45	11.7	225 x (1±10%)
12	≤9.00	≥0.60	15.6	400 x (1±10%)
15	≤11.25	≥0.75	19.5	625x (1±10%)
18	≤13.50	≥0.9	23.4	900 x (1±10%)
24	≤18.00	≥1.2	31.2	1600 x (1±10%)
36	≤27.00	≥1.8	46.8	3600 x (1±10%)
48	≤36.00	≥2.4	62.4	6400 x (1±10%)

**Notes:** 1) The data shown above are initial values.  
2) \*Maximum Voltage refers to the maximum voltage which relay coil could endure in a short period of time.

## SAFETY APPROVAL RATINGS

CQC	17A 277VAC/250VAC 10A 277VAC/250VAC
TUV	17A 277VAC/250VAC 10A 277VAC/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、ISO14001、OHSAS18001 CERTIFIED

## ORDERING INFORMATION

**JT152F / 012 - 1H S F (XXX)**

**Type**

**Coil voltage** 3, 5, 6, 9, 12, 15, 18, 24, 36, 48VDC

**Contact arrangement** 1H:1Form A 1D:1Form B 1Z:1Form C

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

**Insulation standard** F:Class F

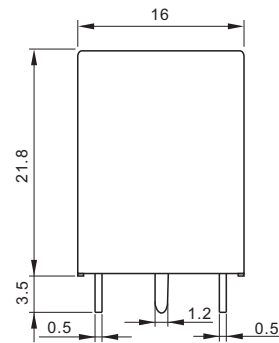
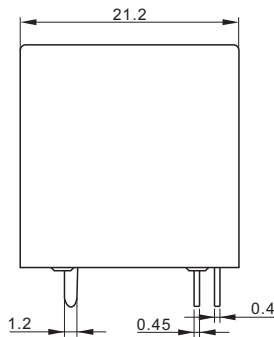
**Special code**<sup>3)</sup> XXX:Customer special requirement Nil:Standrad

- Notes:**1) We recommend dust protected types for a clean environment(free from contaminations like H<sub>2</sub>S,SO<sub>2</sub> or NO<sub>2</sub> dust,ect.).  
 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> or NO<sub>2</sub> dust,ect.).  
 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.

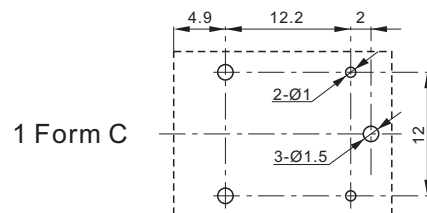
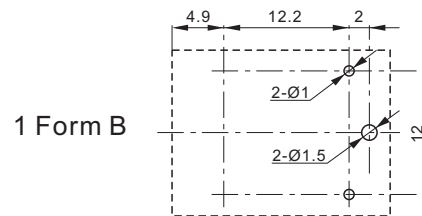
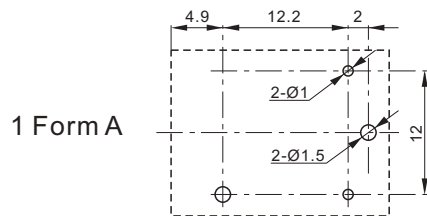
## OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

### Outline Dimensions

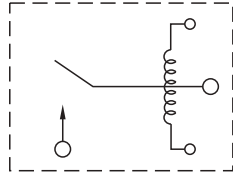


### Wiring Diagram (Bottom view)

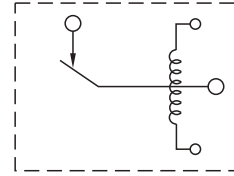


## PCB Layout (Bottom view)

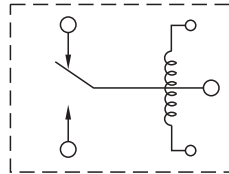
1 Form A



1 Form B



1 Form C



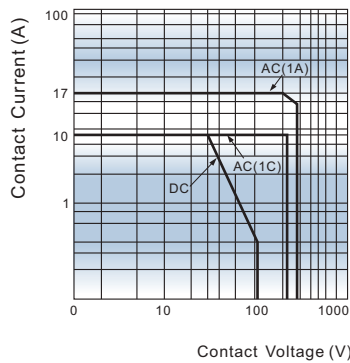
Remark: 1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual product.

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

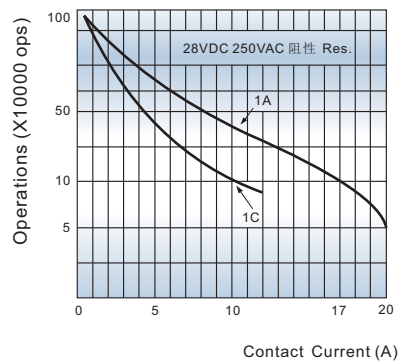
3) The tolerance without indicating for PCB layout is always  $\pm 0.1\text{mm}$ .

## CHARACTERISTIC CURVES

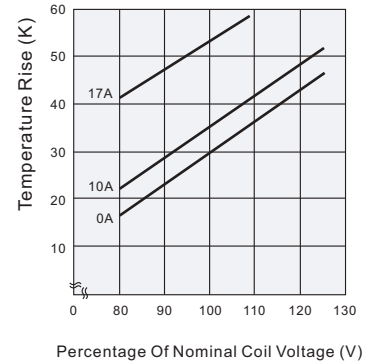
MAX. SWITCHING POWER



ENDURANCE CURVE



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.