

JT32F

SUBMINIATURE HIGH POWER RELAY

C_{RU} US
File No:E319069



File No:R 50265552



File No:13002098917



Features

- 10A switching capability
- 1From A and 1From C configurations
- Subminiature, standard PCB layout
- Plastic sealed and flux proofed types available
- UL insulation system:Class F
- product in accordance to IEC 60335-1 available
- 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,AgSnO ₂		
Contact rating (Res.load)	1A		1C
	H type:	HL type:	
	5A 250VAC 5A 30VDC 10A 125VAC	3A 250VAC 3A 30VDC 5A 125VAC	3A 250VAC 3A 30VDC
Max.switching current	10A	5A	3A
Max.switching power	1250VA 150W	750VA/90W	
Max.switching voltage	250VAC/30VDC		
Mechanical endurance	5 x 10 ⁶ OPS		
Electrical endurance	H type:1 x 10 ⁵ OPS(5A 250VAC, Resistive load,Room temp, 1s on 1s off) HL type:1 x 10 ⁵ OPS(3A 250VAC, Resistive load,Room temp, 1s on 1s off) Z type:1 x 10 ⁵ OPS(NO:3A/NC:3A 250VAC,Resistive load,Room temp, 1s on 9s off)		

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectirc 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.	
Shock resistance	Functional	98m/s ²
	Destructive	980m/s ²
Vibration resistance	10Hz to 55Hz 1.5mm DA	
Humidity	5% to 85% RH	
Ambient temperature	-40℃ to 85℃	
Termination	PCB	
Unit weight	Approx.6g	
Construction	Plastic sealed, Flux proofed	

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

COIL

Coil power	Standard:Approx.450mW;
	Sensitive:Approx.200mW

COIL DATA

at 23℃

Standard type

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. 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 From A)

Nominal Voltage VDC	Pick-up Voltage VDC max.	Drop-out Voltage VDC min.	Max. 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%)

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



JINTIAN RELAY
ISO9001

2018 Rev.1.00

SAFETY APPROVAL RATINGS

UL/CUL	AgCdO AgNi AgSnO ₂	1 Form A	H type:5A 250VAC /30VDC at 70 C 10A 125VDC at 70 C
		1 Form C	HL type:3A 250VAC /30VDC at 70 C HL type:5A 125VAC at 70 C 3A 250VDC/30VDC at 70 C

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

ORDERING INFORMATION

JT32F / 012 -H S L Q 3 (XXX)

Type

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

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

Construction¹⁾²⁾ **S:**Plastic sealed **Nil:**Flux proofed

Contact material **L:**Sensitive(Only for Form A) **Nil:**Standard

Contact material **Q:**High capacity(Only for Sensitive) **Nil:**Standard

Contact material **3:**AgNi **T:**AgSnO₂ **Nil:**AgCdO

Special code³⁾ **XXX:**Customer special requirement **Nil:**Standrad

Notes: 1) Under the ambience with dangerous gas like H₂S,SO₂ or NO₂, plastic sealed type is recommended;Please test the relay in real applications.If the ambience allows,flux proofed type is preferentially recommended.
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

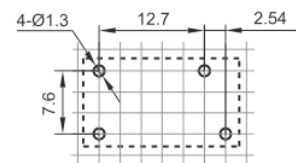
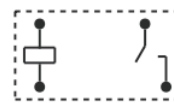
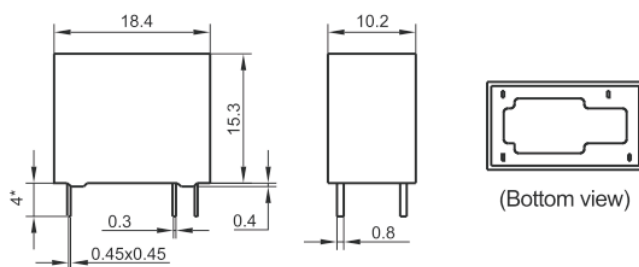
Unit: mm

Outline Dimensions

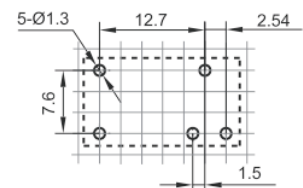
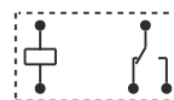
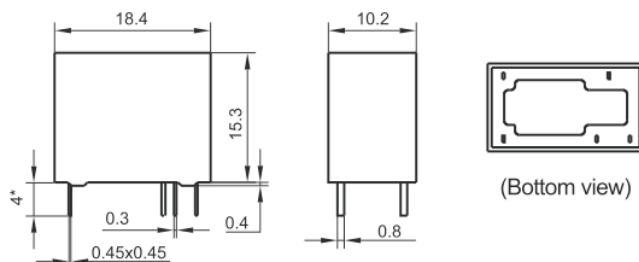
Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)

1 Form A



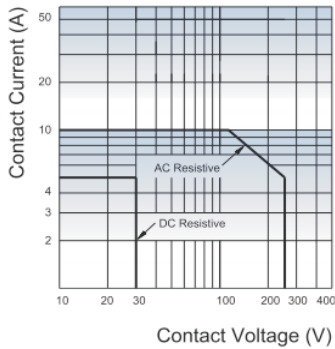
1 Form C



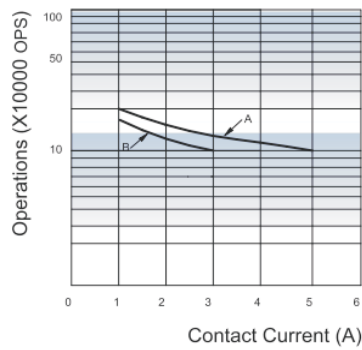
Remark: 1)*The additional tin top is max.1mm.
2)In case of no tolerance shown in outline dimension:outline dimension ≤1mm,tolerance should be ±0.2mm;outline dimension >1mm and ≤5mm,tolerance should be ±0.3mm;outline dimension >5mm,tolerance should be ±0.4mm.
3) The tolerance without indicating for PCB layout is always ±0.1mm.

CHARACTERISTIC CURVES

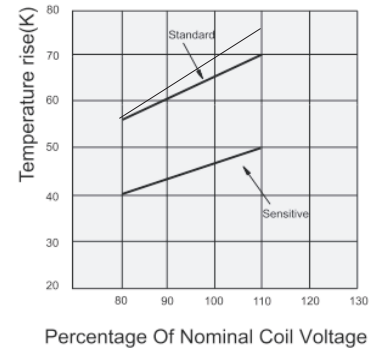
MAXIMUM SWITCHING POWER



EDURANCE CURVE



COIL TEMPERATURE RISE



Notes:

1. Curve A: H type
Curve B: HL type, Z type
2. **Test conditions:**
H type: Resistive load, 5A 250VAC, Room temp., 1s on 1s off
HL type: Resistive load, 3A 250VAC, Room temp., 1s on 1s off
Z type: NO/NC, Resistive load, 3A 250VAC, Room temp., 1 s on 9 s off

Test conditions:

- Standard: 5A at 85 °C
Sensitive: 3A at 85 °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.