

JT33F

SUBMINIATURE HIGH POWER RELAY

C  US
File No:E319069



File No:认证中



File No:1700217384



Features

- 10A switching capability
- Creepage distance:8mm(coil&contacts)
- Creepage distance:NO type 4.5mm,NC type 4mm
- 1From A and 1From C configurations
- Subminiature,standard PCB layout
- Plastic sealed and flux profed types available
- UL insulation system:Class F
- Product in accordance to IEC 60335-1 available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions:(20.5 x 10.2 x 15.3)mm

CONTACT DATA

Contact arrangement	1A,1C		
Contact resistance	100mΩ max.(at 1A 6VDC)		
Contact material	AgSnO ₂		
Contact rating (Res.load)	1A	1C	
		NO	NC
	5A 250VAC	5A 250VAC	3A 250VAC
	5A 30VDC	5A 30VDC	3A 30VDC
	10A 125VAC	10A 125VAC	
Max.switching current	10A	3A	
Max.switching power	1250VA/150W	750VA/90W	
Max.switching voltage	250VAC/30VDC		
Mechanical endurance	5 x 10 ⁶ OPS		
Electrical endurance	1H type:1 x 10 ⁵ OPS(5A 277VAC, General load,Room temp, 1s on 9s off) 1Z type:1 x 10 ⁵ OPS (NO:5A/NC:3A 277VAC,General load, Room temp, 1s on 9s off)		

CHARACTERISTICS

Insulation resistance	1000MΩ (at 500VDC)	
Dielectirc strength	Between coil&contacts	4000VAC 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°C to 70°C	
Termination	PCB	
Unit weight	Approx.7g	
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°C

Standard type

Nominal Voltage VDC	Pick-up Voltage VDC max.	Dorp-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

Nominal Voltage VDC	Pick-up Voltage VDC max.	Dorp-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	AgSnO ₂	1 Form A	5A 277VAC /30VDC at 70°C 10A 125VAC at 70°C 10A 120VAC at 70°C 1A 120VAC at 105°C 15LRA/2.5FLA 120VAC at 105°C 4A 120VAC at 105°C
		1 Form C	NC:3A 277VAC/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

JT33F / 012 -H S L T F (XXX)

Type

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

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

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

Contact power **L:**Sensitive(Only for 1Form A) **Nil:**Standard

Contact material **T:**AgSnO₂

Insulation standard **F:**Class F

Special code⁴⁾ **XXX:**Customer special requirement **Nil:**Standard

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

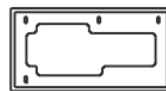
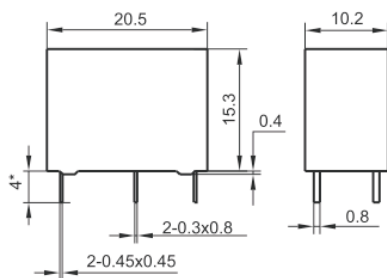
Unit: mm

Outline Dimensions

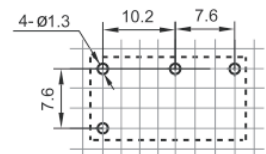
Wiring Diagram
(Bottom view)

PCB Layout
(Bottom view)

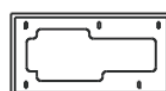
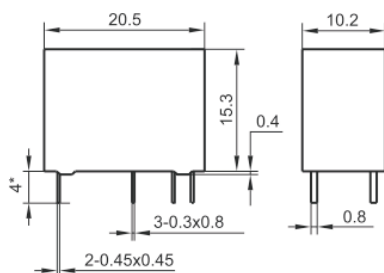
1 Form A



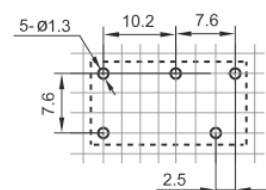
(Bottom view)



1 Form C



(Bottom view)



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

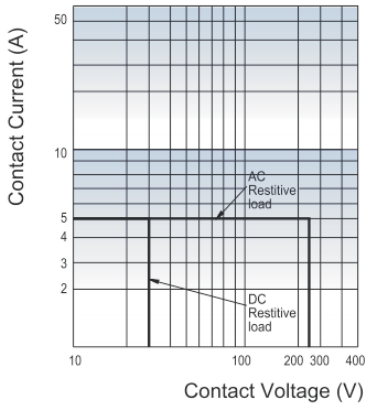
2) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

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

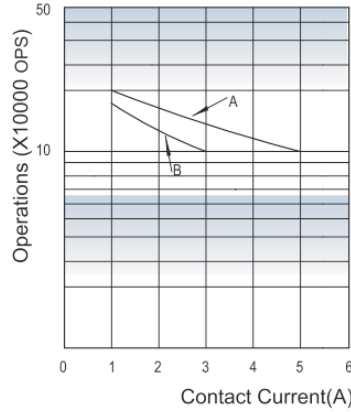
4) The width of the gridding is 2.54mm.

CHARACTERISTIC CURVES

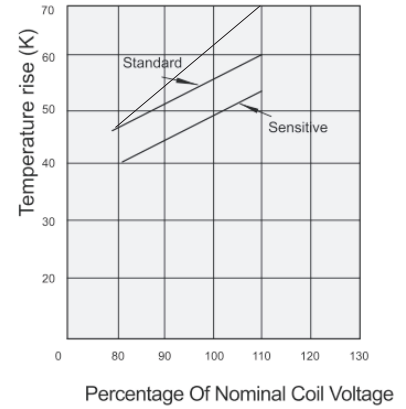
MAXIMUM SWITCHING POWER



ENDURANCE CURVE



COIL TEMPERATURE RISE



Remark:

1. Curve A: standard
Curve B: sensitive
2. Testing conditions:
Standard: flux proofed, resistive load, 5A 250VAC, at room temp. 1s on 9s off.
Sensitive: flux proofed, resistive load, 3A 250VAC, at room temp. 1s on 9s off.

Testing conditions:

- Standard: 5A at 70°C.
- Sensitive: 5A at 70°C
- Mounting distance: 10mm

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.