JT94F SUBMINIATURE HIGH POWER RELAY

c UL us

File No:E319069(AC type only)

Features

- 25A switching capability
- Various terminal types
- Various of mounting position
- Dust protected type
- Environmental friendly product (RoHS compliant)
- Outline Dimensions:(47.0 x 32.0 x 28.5)mm
- UL insulation system:Class F

CONTACT DATA

Contact arrangement	1A,1B,1C,1A+1B
Contact resistance[1)]	200mΩ max.(at 1A 24VDC)
Contact material	$AgSnO_2$,AgCe,AgCdO
Contact rating (Res.load)	18A 277VAC
Max.switching voltage	277VAC
Max.switching current	18A
Max.switching power	4986VA
Mechanical endurance	1×10^6 ops
Electrical endurance	5×10^4 ops (25A 277VAC, Resistive load, $AgSnO_2$,AgCdO,at 65℃,1s on 9s off) 3×10^4 ops(3A 277VAC, General load, AgCe,at 65℃,1s on 9s off)

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

CHARACTERISTICS

Insulation resistance		500MΩ(at 500VDC)
Dielectirc strength	Between coil&contacts	2000VAC 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)		98m/s²
Vibration resistance		10Hz to 55Hz 0.5mm DA
Humidity		5% to 85% RH
Ambient tenperature		-40℃ to 65℃
Termination		QC
Unit weight		Approx. 85g
Construction		Dust protected

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

COIL

Coil power	DC type: Approx. 2.4W; AC type: Approx. 4.0VA

COIL DATA

at 23℃

Nominal Voltage VDC	Pick-up Voltage VDC[1)]	Drop-out Voltage VDC[1)]	Max. Voltage VDC*[2)]	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 VAC	Pick-up Voltage VAC[1)]	Drop-out Voltage VAC[1)]	Max. Voltage VAC*[1)]	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	77 x (1±10%)
48	≤40.8	≥9.6	52.8	280 x (1±10%)
120	≤102	≥24	132	2000 x (1±10%)
240	≤204	≥48	264	7250 x (1±10%)
277	≤235	≥55.4	304.7	11000 x (1±10%)

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

安全认证

UL/CUL	JT94F-10	NO	AgCdO	12FLA, 60LRA, 120VAC at 65°C 8FLA, 48LRA, 250VAC at 65°C 8FLA, 48LRA, 277VAC at 65°C 7FLA, 42LRA, 277VAC at 65°C 25A, 277VAC, Resistive at 65°C
			AgCe	3A, 277VAC, Gen Use at 65°C 277VAC pilot duty, 10A inrush, 1A break at 65°C
	JT94F-11	NC	AgCdO	14FLA, 84LRA, 125VAC at 40°C 8FLA, 48LRA, 250VAC at 65°C 8FLA, 48LRA, 277VAC at 65°C 7FLA, 42LRA, 277VAC at 65°C 25A, 277VAC, Resistive at 65°C
			AgCe	3A, 277VAC, Gen Use at 65°C 277VAC pilot duty, 10A inrush, 1A break at 65°C
	JT94F-12	NO/NC	AgCdO	14FLA, 84LRA, 125VAC at 40°C 8FLA, 48LRA, 250VAC at 65°C 8FLA, 48LRA, 277VAC at 65°C 7FLA, 42LRA, 277VAC at 65°C 25A, 277VAC, Resistive at 65°C
			AgCe	3A, 277VAC, Gen Use at 65°C 277VAC pilot duty, 10A inrush, 1A break at 65°C
	JT94F-13	NO/NC	AgCdO	12FLA, 60LRA, 120VAC at 65°C 8FLA, 48LRA, 250VAC at 65°C 8FLA, 48LRA, 277VAC at 65°C 7FLA, 42LRA, 277VAC at 65°C 18A, 277VAC, Resistive at 65°C 25A, 277VAC, Resistive at 65°C
			AgCe	3A, 277VAC, Gen Use at 65°C 277VAC pilot duty, 10A inrush, 1A break at 65°C

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

ORDERING INFORMATION

	JT94F	-10	A	24	E	-1	(XXX)
Type							
Contact arrangement		**10:**1 Form A **12:**1 Form C **11:**1 Form B **13:**1 Form A+1 Form B					
Coil voltage from			**A**: AC **D**: DC				
Coil voltagr				**AC**: 6VAC to 277VAC **DC**: 6VDC to 120VDC(No UL approved)			
Contact material[1]					**E**:AgCe **T**:$AgSnO_2$ **Nil**:AgCdO		
Mounting						**1**:Flang,Mounting Distance 54.8mm.diameter Φ3.8mm **2**:Flang,Mounting Distance 66.7mm.diameter Φ4.8mm **Nil**:Metal Bracket	
Special code[2]							**XXX**:Customer special requirement **Nil:**Standrad

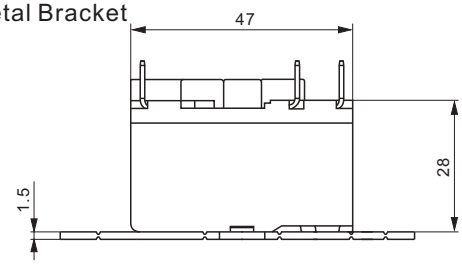
Notes: 1) $AgSnO_2$ contact can be represented as "(T)" after periodic code.
3) The customer special requirement express as special code after evaluating by JINTIAN.

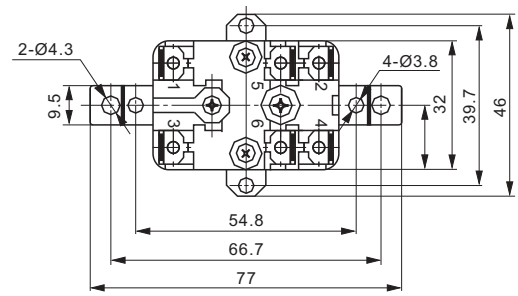
OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Outline Dimensions

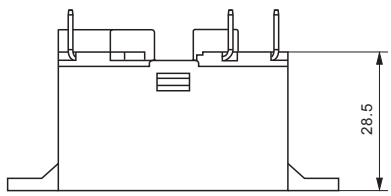
Metal Bracket

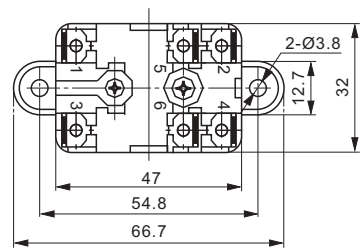




(Top view)

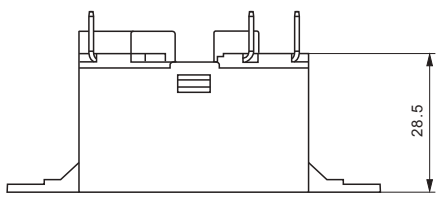
Flang, Mounting Distance 54.8mm

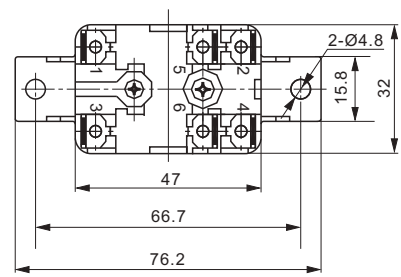




(Top view)

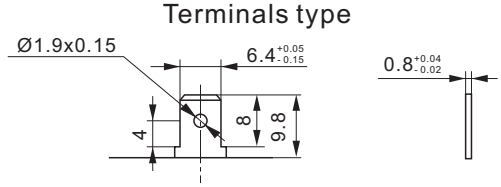
Flang, Mounting Distance 66.7mm





(Top view)

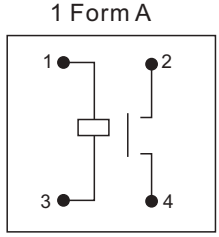
Terminals type



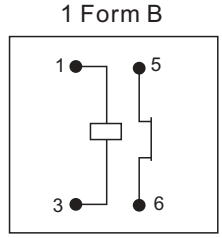
Wiring Digram

(Top view)

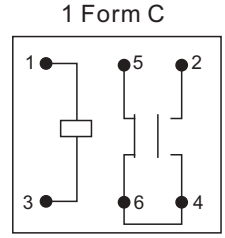
1 Form A



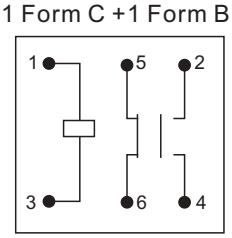
1 Form B



1 Form C



1 Form C +1 Form B



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 producet.

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.

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.

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