JT92F SUBMINIATURE HIGH POWER RELAY

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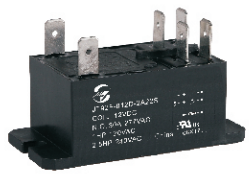


Features

- 30A switching capability
- Creepage distance:8mm
- 4kV dielectric strength(between coil and contacts)
- 2 Form A and 2 Form C configurations
- PCB&QC layouts available
- Plastic sealed and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions:(52.0 x 33.7 x 26.7)mm

CONTACT DATA

Contact arrangement	2A, 2C
Contact resistance[1)]	50mΩ max.(at 1A 24VDC)
Contact material	$AgSnO_2$, AgCdO
Contact rating (Res.load)	NO:30A 250VAC;30A 277VAC NC:3A 250VAC;3A 277VAC
Max.switching voltage	277VAC
Max.switching current	30A
Max.switching power	8310VA
Mechanical endurance	5 x 10^6 ops
Electrical endurance	1 x 10^5 ops(NO:30A 277VAC, Resistive load, Room temp., 1s on 9s off) 1 x 10^5 ops(NC:3A 277VAC, Resistive load, Room temp., 1s on 9s off)

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

CHARACTERISTICS

Insulation resistance		1000MΩ(at 500VDC)
Dielectirc strength	Between coil&contacts	4000VAC 1min
	Between open contacts	1500VAC 1min
	Between contact poles	2000VAC 1min
Surge voltage(between coil & contacts)		10kV(1.2/50μs)
Operate time(at nomi.volt.)		DC type:25ms max.
Release time(at nomi.volt.)		DC type:25ms max.
Temperature rise(at nomi.volt.)		AC type:90K max. DC type:70K max.
Shock resistance	Functional	98m/s^2
	Destructive	980m/s^2
Vibration resistance		10Hz to 55Hz 1.65mm DA
Humidity		5% to 85% RH
Ambient tenperature		AC:-40℃ to 65℃ DC:-40℃ to 85℃
Termination		PCB, QC
Unit weight		Approx. 86g
Construction		Plastic sealed, Flux proofed

Notes: The data shown above are intial values.

COIL

Coil power	DC type:Approx. 1.7W AC type:Approx. 4.0VA

COIL DATA at 23℃

DC type

Coil Code	Nominal Voltage VAC	Pick-up Voltage VAC[1)]	Drop-out Voltage VAC[1)]	Max. Voltage VAC*[2)]	Coil Resistance Ω
005D	5	≤3.8	≥0.5	8.0	15.3x(1±10%)
006D	6	≤4.5	≥0.6	9.6	22x(1±10%)
012D	12	≤9.0	≥1.2	19.2	86x(1±10%)
024D	24	≤18.0	≥2.4	38.4	350x(1±10%)
048D	48	≤36.0	≥4.8	76.8	1390x(1±10%)
110D	110	≤82.5	≥11.0	176.0	7255x(1±10%)

AC type(at 50Hz)

Coil Code	Nominal Voltage VAC	Pick-up Voltage VAC[1)]	Drop-out Voltage VAC[1)]	Max. Voltage VAC*[2)]	Coil Resistance Ω
024A5	24	≤19.2	≥4.8	26.4	45x(1±10%)
120A5	120	≤96.0	≥24.0	132.0	1125x(1±10%)
208A5	208	≤166.4	≥41.6	229.0	3278x(1±10%)
220A5	220	≤176.0	≥44.0	242.0	3800x(1±10%)
240A5	240	≤192.0	≥48.0	264.0	4500x(1±10%)
277A5	277	≤221.6	≥55.4	305.0	5960x(1±10%)

AC type(at 60Hz)

Coil Code	Nominal Voltage VAC	Pick-up Voltage VAC[1)]	Drop-out Voltage VAC[1)]	Max. Voltage VAC*[2)]	Coil Resistance Ω
024A6	24	≤19.2	≥4.8	26.4	35.7x(1±10%)
120A6	120	≤96.0	≥24.0	132.0	830x(1±10%)
208A6	208	≤166.4	≥41.6	229.0	2600x(1±10%)
220A6	220	≤176.0	≥44.0	242.0	2870x(1±10%)
240A6	240	≤192.0	≥48.0	264.0	3800x(1±10%)
277A6	277	≤221.6	≥55.4	305.0	4700x(1±10%)

COIL DATA

at 23°C

AC type(at 50Hz/60Hz)

Coil Code	Nominal Voltage VAC	Pick-up Voltage VAC[1)]		Drop-out Voltage VAC[1)]		Max. Voltage VAC*[2)]	Coil Resistance Ω
		50Hz	60Hz	50Hz	60Hz		
120A	120	≤88	≤96.0	≥22	≥24.0	132	950 x (1±10%)
208A	208	≤160	≤166.4	≥40	≥41.6	229	2841 x (1±10%)
240A	240	≤176	≤192.0	≥44	≥48.0	264	3800 x (1±10%)
277A	277	≤200	≤221.6	≥50	≥55.4	305	5485 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.

SAFETY APPROVAL RATINGS

UL/CUL	NO	30A 277VAC 1HP 120VAC 2.5HP 240VAC 110LRA/25.3 FLA 240VAC(DC type)
	NC	3A 277VAC

Notes: 1) UL certified loads are tested at 40°C.
2) Only typical loads are listed above.Other load specificationgs can be avaliable upon request.

ORDERING INFORMATION

JT92F - 012 -2C 2 2 F (XXX)

Type

Coil voltage
XXX D: DC type(5, 6 ,12, 24, 48, 110VDC)
XXX A5: AC type 50Hz(24, 120, 208, 220, 240, 277VAC)
XXX A6: AC type 60Hz (24, 120, 208, 220, 240, 277VAC)
XXX A: AC type 50Hz/60Hz (120, 208, 240, 277VAC)

Contact arrangement **2A**: 2 Form A **2C**: 2 Form C

Termination[1)] **1**: PCB **2,3**: QC

Contact material **1**: $AgSnO_2$ **2**: AgCdO

Construction[2)] **S**: Plastic sealed **F**: Flux proofed

Special code[3)] **XXX**: Customer special requirement **Nil**: Standrad

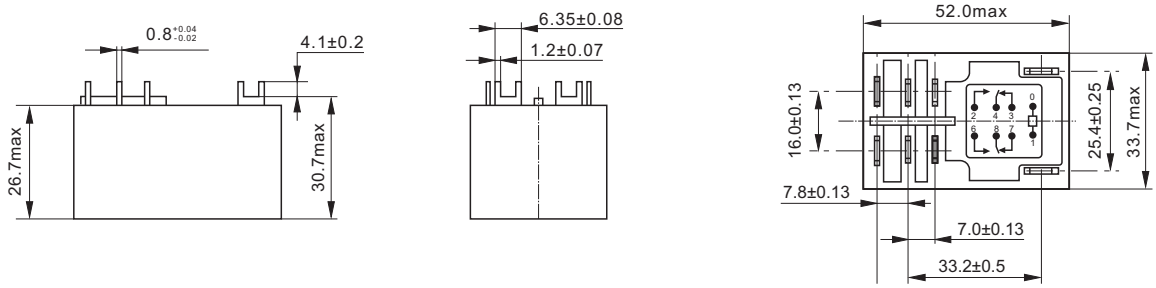
Notes: 1) For terminals,no solding or washing is allowed,For PCB terminals,please refer to us for soldering condition and part specification for necessary washing or surface processing after it is solded to PCB.
2) We recommend flux proofed types for a clean environment (free from contaminations like H_2S,SO_2,NO_2,dust,etc.).
We suggust to choose plastic sealed types and validate it in real application for an unclean environment(with contaminations like H_2S,SO_2,NO_2, dust,etc.).
3) The customer special requirement express as special code after evaluating by JINTIAN.

OUTLINE DIMENSIONS,WIRING DIAGRAM AND PC BOARD LAYOUT

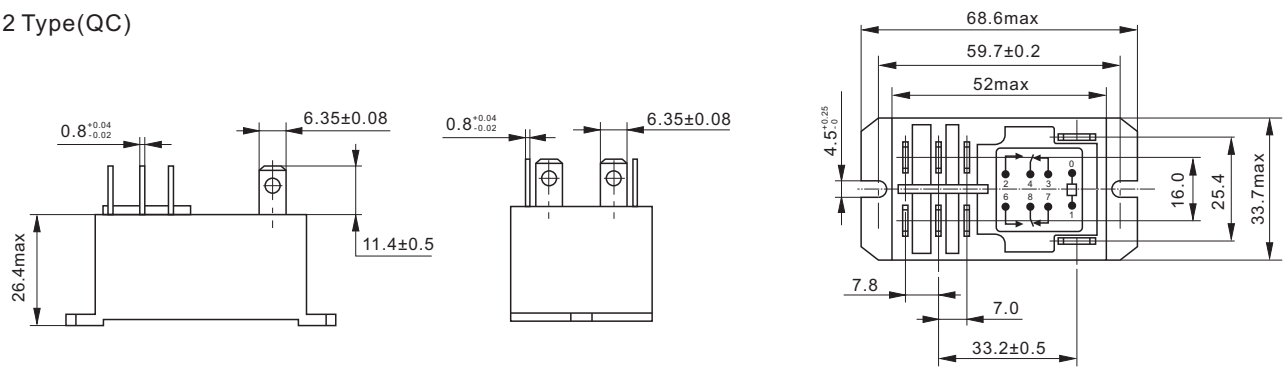
Unit: mm

Outline Dimensions

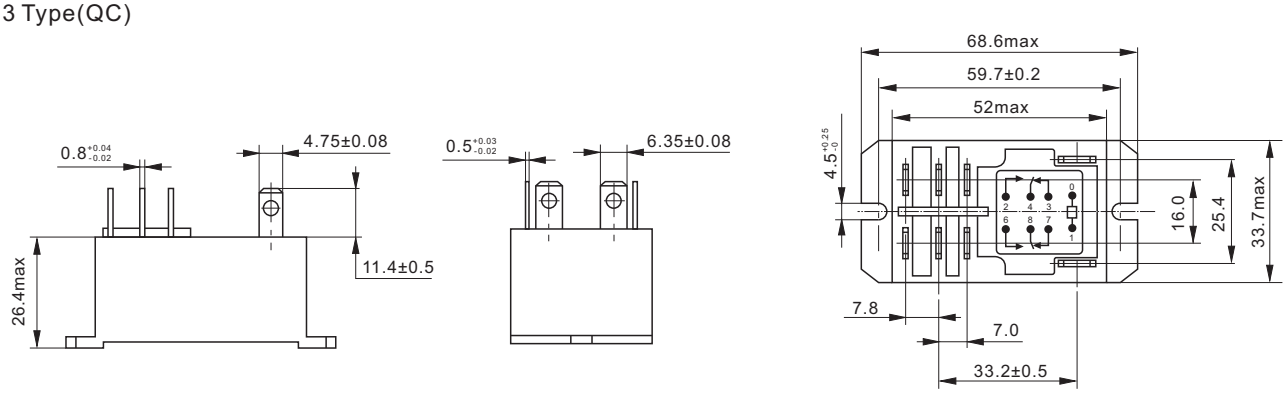
1 Type(PCB)



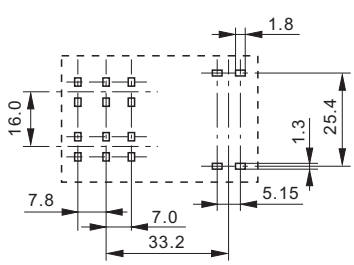
2 Type(QC)



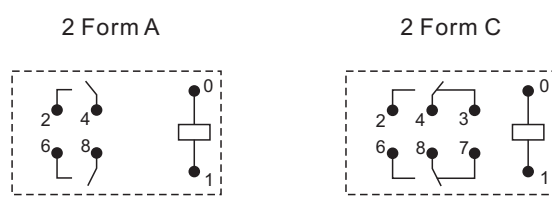
3 Type(QC)



PCB Layout(Bottom view)



Wiring Diagram(Bottom view)



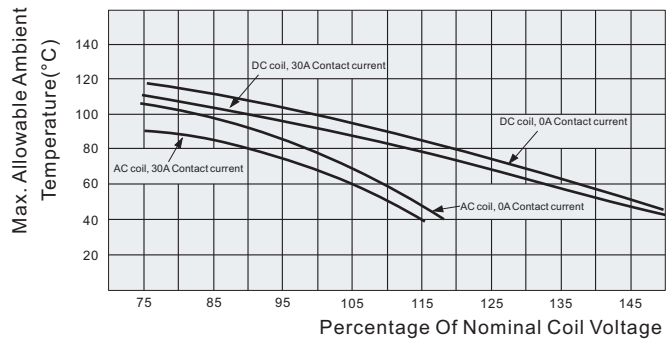
Remark:1) The pin dimension of the product outline drawing is the size before tinning (it will become larger after tinning), and the mounting hole size is the recommended design size of the PCB board hole. The specific PCB board hole design size can be mapped and adjusted according to the actual producet.

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.

3) The tolerance without indicating for PCB layout is always±0.1mm.

CHARACTERISTIC CURVES

MAX. ALLOWABLE AMBIENT TEMPERATURE



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.