

JT102FW

SOLAR RELAY

UL US
File No:E319069

File No:R 50276259

CQC
File No:CQC13002100586



Typical Applications

Solar inverter, AC/DC power control, industrial control etc..

Features

- 35A switching capability
- Applicable to solar photovoltaic inverter
- Applicable to UPS
- 1.5mm and 1.8mm contact gap available
- Product in accordance to IEC60335-1 available
- Low coil holding voltage contribute to saving energy of equipment
- UL insulation system: Class F available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (30.5 x 16.0 x 26.5)mm

CONTACT DATA

Contact arrangement	1A
Contact resistance ¹⁾	100mΩ max.(at 1A 6VDC)
Contact material	AgSnO ₂
Contact rating	32A 250VAC/277VAC 35A 250VAC/277VAC
Max.switching voltage	277VAC
Max.switching current	35A
Max.switching power	9695VA
Mechanical endurance	1 x 10 ⁶ ops
Electrical endurance	3x10 ⁴ ops(35A 277VAC, Resistive load, 1s on 9s off) 5x10 ⁴ ops(32A 277VAC, Resistive load, 1s on 9s off)

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

CHARACTERISTICS

Insulation resistance		1000MΩ (at 500VDC)
Dielectric strength	Between coil & contacts	4500VAC 1min
	Between open contacts	2500VAC 1min
Surge withstand voltage		10kV(1.2/50μs)
Operate time(at nomi.volt.)		20ms max.
Release time(at nomi.volt.)		10ms max.
Shock resistance	Functional	100m/s ²
	Destructive	1000m/s ²
Vibration resistance		10Hz to 55Hz 1.5mm DA
Humidity		5% to 85% RH
Ambient temperature		-40°C to 85°C
Termination		PCB
Unit weight		Approx. 23g
Construction		Dust protected

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

COIL

Coil power	Approx. 1.4W
Holding voltage ⁽¹⁾	40% to 55% U _N (at 23°C) 50% to 55% U _N (at 85°C)

Notes: 1) The coil holding voltage is the voltage applied to coil 100ms after the rated voltage. To avoid overheating and burning, the coil can not be consistently applied to with voltage larger than maximum holding voltage.

COIL DATA

at 23°C

Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Rated current mA	Coil Resistance Ω
5	≤3.75	≥0.25	280	18 x (1±10%)
9	≤6.75	≥0.45	156	58 x (1±10%)
12	≤9.00	≥0.60	117	103 x (1±10%)
18	≤13.5	≥0.90	78	231 x (1±10%)
24	≤18.0	≥1.20	58	411 x (1±10%)
48	≤36.0	≥2.40	29	1646 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

UL/CUL TUV CQC	32A 250VAC/277VAC 85°C 35A 250VAC/277VAC 85°C
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Notes: 1) Only typical loads are listed above.

Other load specifications can be available upon request.



JINTIAN RELAY

ISO9001、ISO14001、OHSAS18001 CERTIFIED

ORDERING INFORMATION

Type JT102FW/ T -12VDC (XXX)

Contact material T: AgSnO₂

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

Special code³⁾ XXX: Customer special requirement Nil: Standrad

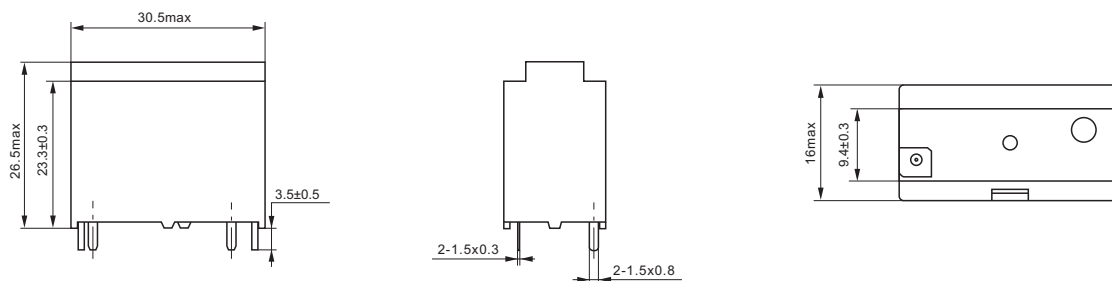
Notes: 1) JT102FW is dust protected products, water cleaning is not allowed.

3) The customer special requirement express as special code after evaluating by JINTIAN.

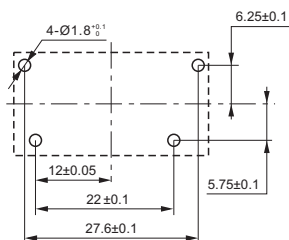
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

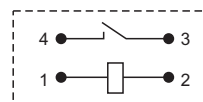
Outline Dimensions



Wiring Diagram (Bottom view)



PCB Layout (Bottom view)



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 ≤ 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.

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.