Panasonic
ideas for life

Ideal for power supply 1a/1c/2a/2c/5A/10A power relays

JW RELAYS

Compliance with RoHS Directive

FEATURES

- **Miniature package with universal terminal footprint**
- **High dielectric withstanding for transient protection: 10,000 V surge in μs between coil and contact**
- **Sealed construction**
- **Class B coil insulation types available**
- **TV rated (TV-5) types available (only for 1 Form A type)**
- **VDE, TÜV, SEMKO, SEV, FIMKO, TV-5 also approved**
- **Sockets are available.**

TYPICAL APPLICATIONS

1. Home appliances
TV sets, VCR, Microwave ovens
2. Office machines
Photocopiers, Vending machines
3. Industrial equipment
NC machines, Robots, Temperature controllers

ORDERING INFORMATION

JW □ □ □ **N** - □ - □ - □

Contact arrangement
1: 1 Form C
1a: 1 Form A
2: 2 Form C
2a: 2 Form A

Contact capacity
Nil: Standard (5 A)
F: High capacity (10 A)*

Protective construction
S: Sealed type
H: Flux-resistant type

Pick-up voltage
N: 70% of nominal voltage

Coil insulation class
Nil: Class E insulation
B: Class B insulation

Nominal coil voltage
DC5V, DC6V, DC9V, DC12V, DC24V, DC48V

Contact material
F: $AgSnO_2$ type (1a)
Nil: AgNi type (1c, 2a, 2c)

*Only for 1 Form A and 1 Form C type
Certified by UL, CSA, VDE, SEMKO, FIMKO and SEV
Note: When ordering TV rated (TV-5) types, add suffix-TV (available only for 1 Form A type).

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TYPES

1) 1 Form A Standard (5A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW1aSN-DC5V-F	JW1aHN-DC5V-F
6V DC	JW1aSN-DC6V-F	JW1aHN-DC6V-F
9V DC	JW1aSN-DC9V-F	JW1aHN-DC9V-F
12V DC	JW1aSN-DC12V-F	JW1aHN-DC12V-F
24V DC	JW1aSN-DC24V-F	JW1aHN-DC24V-F
48V DC	JW1aSN-DC48V-F	JW1aHN-DC48V-F

Standard packing: Carton 100 pcs. Case 500 pcs.

2) 1 Form A High capacity (10 A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW1aFSN-DC5V-F	JW1aFHN-DC5V-F
6V DC	JW1aFSN-DC6V-F	JW1aFHN-DC6V-F
9V DC	JW1aFSN-DC9V-F	JW1aFHN-DC9V-F
12V DC	JW1aFSN-DC12V-F	JW1aFHN-DC12V-F
24V DC	JW1aFSN-DC24V-F	JW1aFHN-DC24V-F
48V DC	JW1aFSN-DC48V-F	JW1aFHN-DC48V-F

Standard packing: Carton 100 pcs. Case 500 pcs.

3) 1 Form C Standard (5A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW1SN-DC5V	JW1HN-DC5V
6V DC	JW1SN-DC6V	JW1HN-DC6V
9V DC	JW1SN-DC9V	JW1HN-DC9V
12V DC	JW1SN-DC12V	JW1HN-DC12V
24V DC	JW1SN-DC24V	JW1HN-DC24V
48V DC	JW1SN-DC48V	JW1HN-DC48V

Standard packing: Carton 100 pcs. Case 500 pcs.

4) 1 Form C High capacity (10 A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW1FSN-DC5V	JW1FHN-DC5V
6V DC	JW1FSN-DC6V	JW1FHN-DC6V
9V DC	JW1FSN-DC9V	JW1FHN-DC9V
12V DC	JW1FSN-DC12V	JW1FHN-DC12V
24V DC	JW1FSN-DC24V	JW1FHN-DC24V
48V DC	JW1FSN-DC48V	JW1FHN-DC48V

Standard packing: Carton 100 pcs. Case 500 pcs.

5) 2 Form A Standard (5A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW2aSN-DC5V	JW2aHN-DC5V
6V DC	JW2aSN-DC6V	JW2aHN-DC6V
9V DC	JW2aSN-DC9V	JW2aHN-DC9V
12V DC	JW2aSN-DC12V	JW2aHN-DC12V
24V DC	JW2aSN-DC24V	JW2aHN-DC24V
48V DC	JW2aSN-DC48V	JW2aHN-DC48V

Standard packing: Carton 100 pcs. Case 500 pcs.

6) 2 Form C Standard (5A) type

Nominal coil voltage	Sealed type	Flux-resistant type
	Part No.	Part No.
5V DC	JW2SN-DC5V	JW2HN-DC5V
6V DC	JW2SN-DC6V	JW2HN-DC6V
9V DC	JW2SN-DC9V	JW2HN-DC9V
12V DC	JW2SN-DC12V	JW2HN-DC12V
24V DC	JW2SN-DC24V	JW2HN-DC24V
48V DC	JW2SN-DC48V	JW2HN-DC48V

Standard packing: Carton 100 pcs. Case 500 pcs.
Note: Class B coil insulation type is available.
Ex) JW1aSN-B-DC12V-F

* For sockets, see page 157.

RATING

1. Coil data

Nominal coil voltage	Pick-up voltage (at 20°C 68°F)	Drop-out voltage (at 20°C 68°F)	Nominal operating current [±10%] (at 20°C 68°F)	Coil resistance [±10%] (at 20°C 68°F)	Nominal operating power	Max. applied voltage (at 20°C 68°F)
5V DC	70%V or less of nominal voltage (Initial)	10%V or more of nominal voltage (Initial)	106mA	47Ω	530mW	130%V of nominal voltage (at 60°C 140°F) 120%V of nominal voltage (at 85°C 185°F)*4
6V DC			88mA	68Ω		
9V DC			58mA	155Ω		
12V DC			44mA	270Ω		
24V DC			22mA	1,100Ω		
48V DC			11mA	4,400Ω		

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