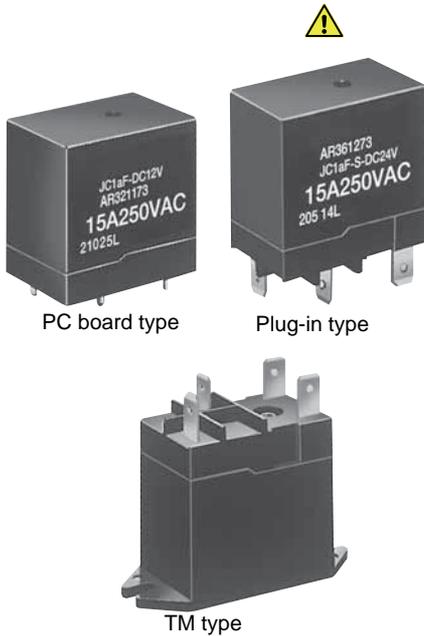


Panasonic

ideas for life

Wide variation
1a 15A, 2a 10A
power relays

JC RELAYS



FEATURES

- **High inrush current capability**
1 Form A: 163 A inrush (TV-8)
2 Form A: 111 A inrush (TV-5)
- **High dielectric withstanding for transient protection:**
JC can withstand 10,000 V surge in μ s between coil and contact.
- **Clearance and creepage distance contact/coil:**
8 mm
- **Electrical life:**
1 Form A: 10^5 ope. at 15 A 250 V AC resistive load
2 Form A: 10^5 ope. at 10 A 250 V AC resistive load
- **UL, CSA, VDE, TÜV, SEMKO also approved.**

TYPICAL APPLICATIONS

- Automatic garage door openers
- Microwave ovens
- Dryers
- Vending machines
- Copiers
- Air conditioners
- Stereo equipment
- TV sets

 Products to be discontinued.

ORDERING INFORMATION

JC F - - - F

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

Mounting classification
Nil: PC board terminal
S: Plug-in terminal
TM: Top mounting

Nominal coil voltage
DC6V, DC12V, DC24V, DC48V

Contact material
F: AgSnO₂ type

Note: Certified by UL, CSA, VDE, TÜV and SEMKO

TYPES

Contact arrangement	Nominal coil voltage	PC board type	Plug-in type	Top mounting type
		Part No.	Part No.	Part No.
1 Form A	6V DC	JC1aF-DC6V-F	 JC1aF-S-DC6V-F	JC1aF-TM-DC6V-F
	12V DC	JC1aF-DC12V-F	 JC1aF-S-DC12V-F	JC1aF-TM-DC12V-F
	24V DC	JC1aF-DC24V-F	 JC1aF-S-DC24V-F	JC1aF-TM-DC24V-F
	48V DC	JC1aF-DC48V-F	 JC1aF-S-DC48V-F	JC1aF-TM-DC48V-F
2 Form A	6V DC	JC2aF-DC6V-F	 JC2aF-S-DC6V-F	JC2aF-TM-DC6V-F
	12V DC	JC2aF-DC12V-F	 JC2aF-S-DC12V-F	JC2aF-TM-DC12V-F
	24V DC	JC2aF-DC24V-F	 JC2aF-S-DC24V-F	JC2aF-TM-DC24V-F
	48V DC	JC2aF-DC48V-F	 JC2aF-S-DC48V-F	JC2aF-TM-DC48V-F

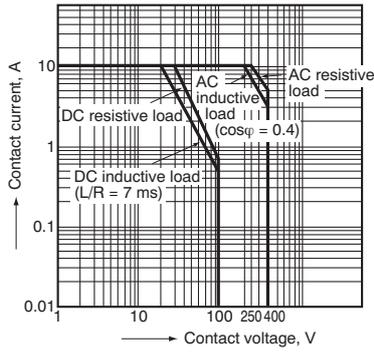
Standard packing; PC board type: Carton 50 pcs. Case 200 pcs.

Plug-in and Top mounting type: Carton 20 pcs. Case 200 pcs.

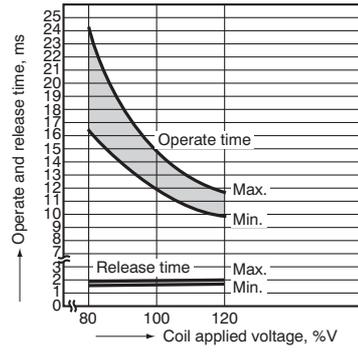
Notes: 1. Please refer to the "Standards Chart" for product certification.
2. 5 V DC type is also available.

JC2a type

1. Maximum value for switching capacity



2. Operate / release time



DIMENSIONS (mm inch)

Download [CAD Data](#) from our Web site.

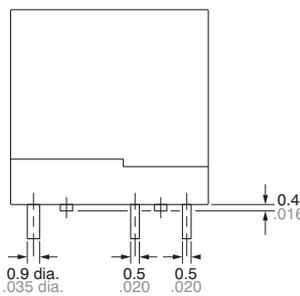
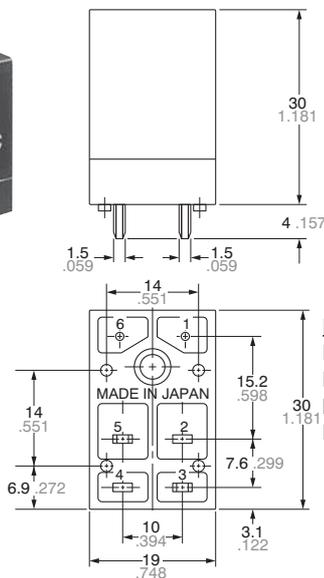
PC board type

1) JC 1 Form A

[CAD Data](#)

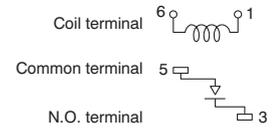


External dimensions

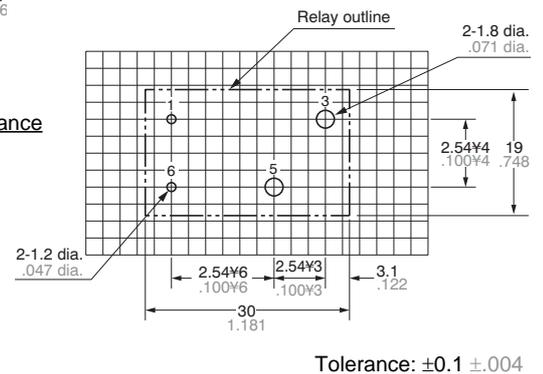


Dimension: **General tolerance**
 Less than 1mm .039inch: $\pm 0.2 \pm 0.08$
 Min. 1mm .039inch
 less than 3mm .118 inch: $\pm 0.3 \pm 0.12$
 Min. 3mm .118 inch: $\pm 0.5 \pm 0.20$

Schematic (Bottom view)



PC board pattern (Bottom view)

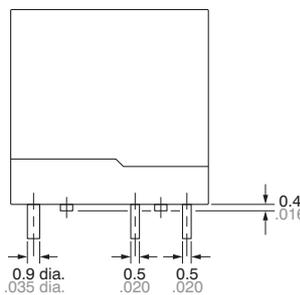
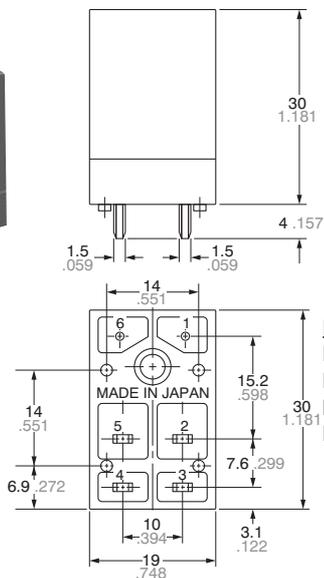


2) JC 2 Form A

[CAD Data](#)

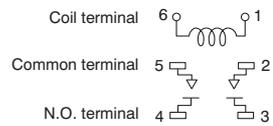


External dimensions

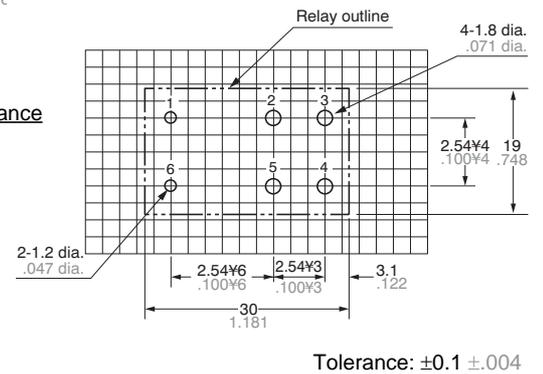


Dimension: **General tolerance**
 Less than 1mm .039inch: $\pm 0.2 \pm 0.08$
 Min. 1mm .039inch
 less than 3mm .118 inch: $\pm 0.3 \pm 0.12$
 Min. 3mm .118 inch: $\pm 0.5 \pm 0.20$

Schematic (Bottom view)



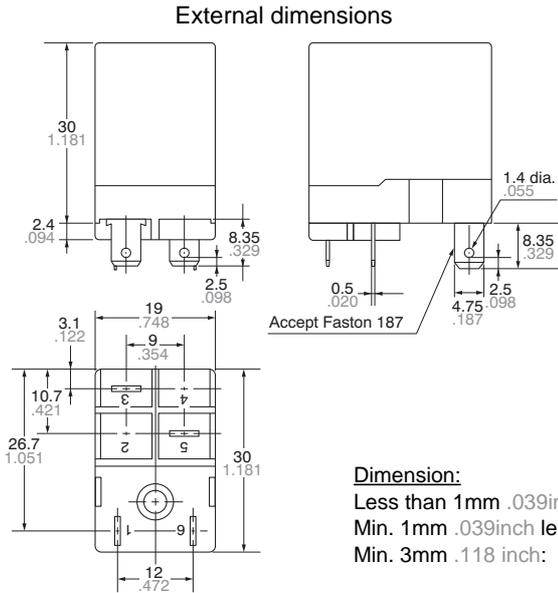
PC board pattern (Bottom view)



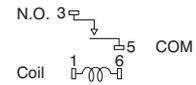
Plug-in type

1) JC 1 Form A

 CAD Data



Schematic (Bottom view)

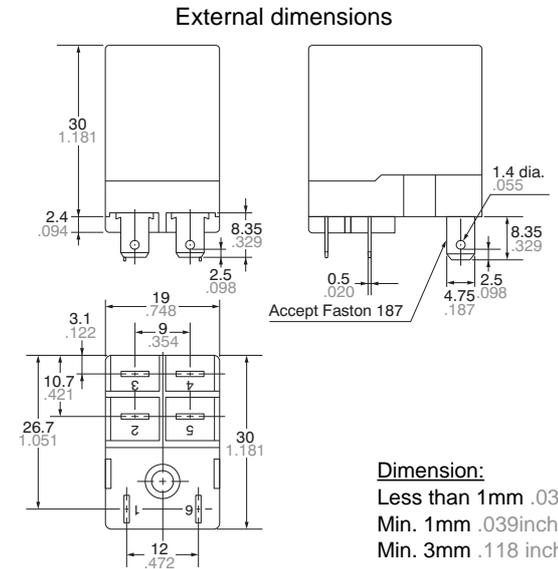


General tolerance

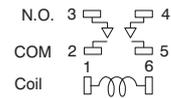
±0.2 ±.008
 ±0.3 ±.012
 ±0.5 ±.020

2) JC 2 Form A

 CAD Data



Schematic (Bottom view)



General tolerance

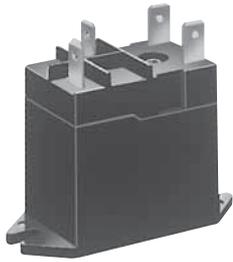
±0.2 ±.008
 ±0.3 ±.012
 ±0.5 ±.020

Products marked  are discontinued as of August 31, 2011

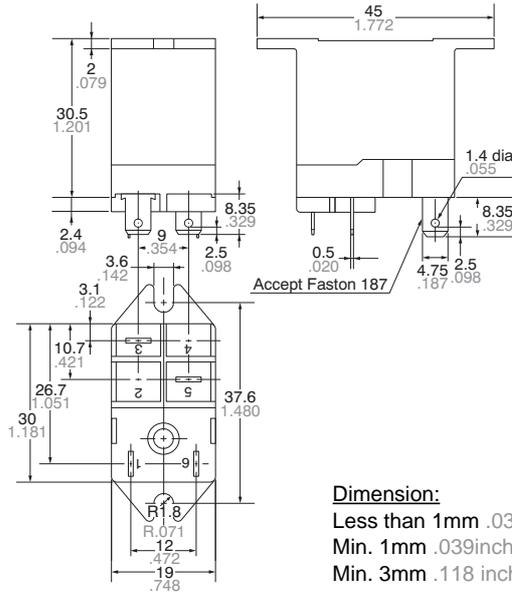
Top mount type (TM type)

1) JC 1 Form A

[CAD Data](#)



External dimensions



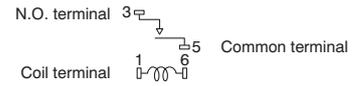
Dimension:

Less than 1mm .039inch:
 Min. 1mm .039inch less than 3mm .118 inch:
 Min. 3mm .118 inch:

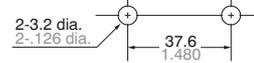
General tolerance

±0.2 ±.008
 ±0.3 ±.012
 ±0.5 ±.020

Schematic



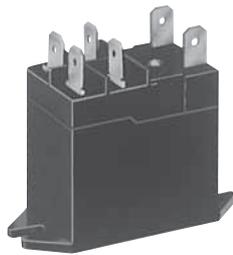
Hole spacing



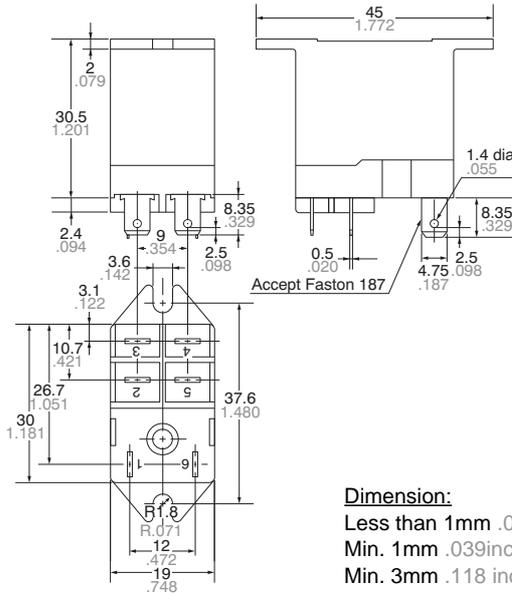
Tolerance: ±0.1 ±.004

2) JC 2 Form A

[CAD Data](#)



External dimensions



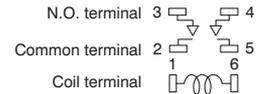
Dimension:

Less than 1mm .039inch:
 Min. 1mm .039inch less than 3mm .118 inch:
 Min. 3mm .118 inch:

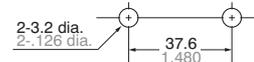
General tolerance

±0.2 ±.008
 ±0.3 ±.012
 ±0.5 ±.020

Schematic (Bottom view)



Hole spacing



Tolerance: ±0.1 ±.004

SAFETY STANDARDS

Item	UL/C-UL (Recognized)		CSA (Certified)		VDE (Certified)		TV rating (UL/CSA)		TÜV (Certified)		SEMKO (Certified)	
	File No.	Contact rating	File No.	Contact rating	File No.	Contact rating	File No.	Rating	File No.	Rating	File No.	Contact rating
1 Form A	E43028	15A 250V AC 15A 30V DC 1HP 125V AC 1HP 250V AC	LR26550 etc.	15A 250V AC 15A 30V DC 1HP 125V AC 1HP 250V AC	40016951 *1	10A 250V AC (cosφ=1.0) 7.5A 250V AC (cosφ=0.4) 10A 30V DC (0ms)	UL E43028 CSA LR26550	TV-8	B 08 07 13461 251	15A 250V AC (cosφ=1.0)	606466 *2	15/120A 250V AC
2 Form A	E43028	10A 250V AC 10A 30V DC 1/3HP 125V AC 1/2HP 250V AC	LR26550 etc.	10A 250V AC 10A 30V DC 1/3HP 125V AC 1/2HP 250V AC	40016951 *1	5A 250V AC (cosφ=1.0) 3A 250V AC (cosφ=0.4) 5A 30V DC (0ms)	UL E43028 CSA LR26550 etc.	TV-5	B 08 07 13461 251	10A 250V AC (cosφ=1.0) 5A 50V DC (0ms)	606466 *2	5/40A 250V AC

Notes:

- *1.Part numbers 1aF and 2aF are not VDE certified. Part numbers 1a and 2a are.
- *2.Part numbers 1aF and 2aF are not SEMKO certified. Part numbers 1a and 2a are.

For Cautions for Use, see [Relay Technical Information](#).

ACCESSORIES



JC1-SS



JC2-SS



JC1-PS



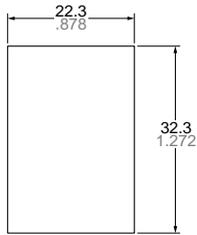
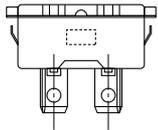
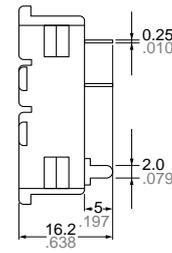
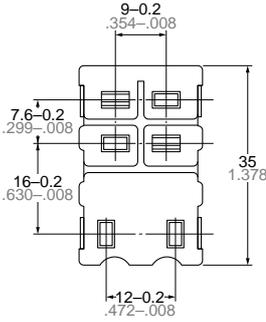
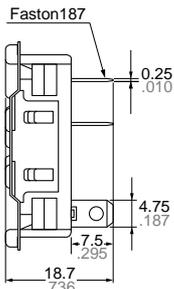
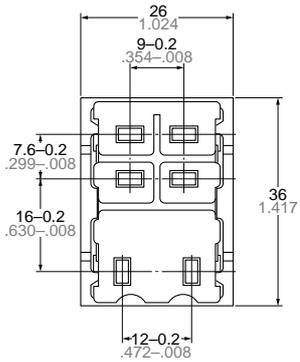
JC2-PS

JC2-SS

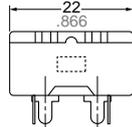
JC2-PS

mm inch

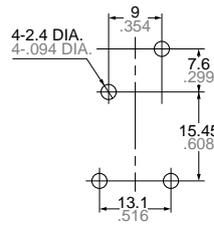
Tolerance: $\pm 0.5 \pm .020$



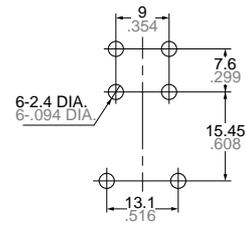
Panel cutout
Tolerance: $\pm 0.1 \pm .004$



JC1-PS



JC2-PS



PC board Pattern
Tolerance: $\pm 0.1 \pm .004$

(Note)
Outward dimensions and chassis cutout dimensions for JC1-SS and JC1-PS are same as those of JC2-SS and JC2-PS respectively.
UL/CSA approved type is standard.

Panasonic
ideas for life

**COMPACT POWER RELAYS
FOR HIGH DC LOADS**

JC RELAYS
(Special Type)



Data sheet addition for JC Relay

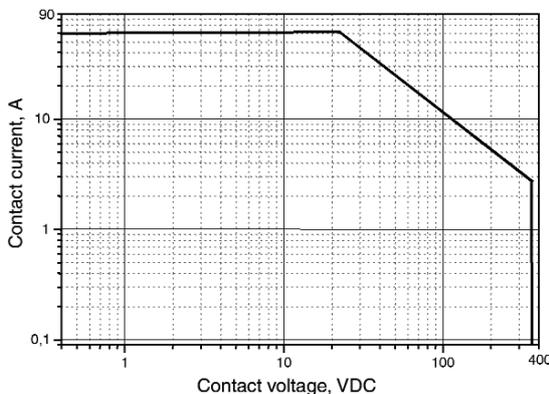
- Integrated arc-blowing magnet for high DC loads [H73 type]
- High switching capacity: 20A/60V DC
- Clearance and creepage distance contact/coil: 8 mm
- Two contacts connected in series ensures even higher life expectancy

APPLICATIONS: Switching of DC loads in devices such as
 - Control of Industrial DC motors
 - Emergency power-off for DC loads

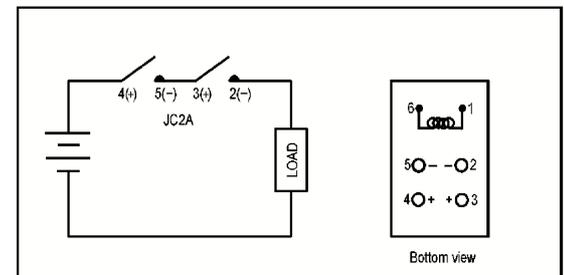
Arrangement		2 Form A	
Contact material		AgSnO ₂	
Contact connection		one contact	two contacts in series
Rating (resistive) load	250VDC / 5A	1 × 10 ⁴ ops.	2 × 10 ⁴ ops.
	250VDC / 4A	3 × 10 ⁴ ops.	4 × 10 ⁴ ops.
Special loads test data (min. operations at 20°C)	220VDC / 1,6A; L/R = 14.6ms (1s On, 4s Off)	2 × 10 ⁴	3 × 10 ⁴
	220VDC / 1A; L/R = 17.4ms (1s On, 4s Off)	2 × 10 ⁴	3 × 10 ⁴
	60VDC / 20A; resistive load (30s On, 30s Off)	1 × 10 ⁴	2 × 10 ⁴

Mechanical, endurance and coil data according to JC-datasheet

Load limit curve for connection in series



Connection diagram



Attention: For the Blow-out effect, the polarity must be defined as: (-) at contacts: 2, 5
 (+) at contacts: 3, 4

ORDERING AND TYPE INFORMATION (values at 20°C)

Type	Nominal voltage, V DC	Pick-up voltage, V DC (max.)	Drop-out voltage, V DC (min.)	Nominal operating power, W	Coil resistance, Ω (±10%)
JC2aF-DC5V-Y1-F-H73	5	4.0	0.5	1	25
JC2aF-DC6V-Y1-F-H73	6	4.8	0.6	1	36
JC2aF-DC12V-Y1-F-H73	12	9.6	1.2	1	144
JC2aF-DC24V-Y1-F-H73	24	19.2	2.4	1	576
JC2aF-DC48V-Y1-F-H73	48	38.4	4.8	1	2304