

POWER RELAY

1 POLE—8 A (MEDIUM LOAD CONTROL)

JS SERIES

■ FEATURES

- UL, CSA, VDE, SEV, SEMKO, FIMKO, ÖVE, BSI recognized
- UL class B (130°C) insulation
- 1 form A (SPST-NO) or 1 form C (SPDT) contact
- Low profile and space saving—Height: 12.5 mm
—Mounting space: 290 mm²
- High sensitivity in small package
—Operating power 0.11 to 0.14 W
—Nominal power 0.22 to 0.29 W
- High isolation in small package
—Insulation distance : 8 mm
—Dielectric strength : 5,000 VAC (between coil and contacts)
—Surge strength : 10,000 V
- Plastic materials—UL 94 flame class V-0
—UL CTI level class 2
- Plastic sealed type



■ ORDERING INFORMATION

[Example] $\frac{JS}{(a)}$ - $\frac{12}{(*)}$ $\frac{M}{(b)}$ $\frac{E}{(c)}$ - $\frac{K}{(e)}$ $\frac{T}{(f)}$

(a)	Series Name	JS : JS Series
(b)	Nominal Voltage	Refer to the COIL DATA CHART
(c)	Contact Arrangement	Nil : 1 form C (SPDT) M : 1 form A (SPST-NO)
(d)	Contact Material	Nil : Gold plate silver alloy E : Silver alloy N : Silver tin oxide gold overlay
(e)	Enclosure	K : Plastic sealed type
(f)	Construction	Nil: 3.2 mm T : 5.0 mm (only JS-MN)

Note: Actual marking omits the hyphen (-) of (*)

■ SAFETY STANDARD AND FILE NUMBERS

UL508, 873 (File No. E56140, E108658)

C22.2 No. 14 (File No. LR35579)

VDE 0435, 0631, 0700 (File No. 11039-4940-1010)

Nominal voltage	Contact rating
5 to 60 VDC	1/3 HP 125 VAC, 1/2 HP 250 VAC 10 A 30 VDC/250 VAC, resistive 3A 250 VAC inductive (PF = 0.4) Pilot duty B 300, C150, Q300

■ SPECIFICATIONS

Item		JS	
Contact	Arrangement	1 form A (SPST-NO), 1 form C (SPDT)	
	Material	Gold plate silver alloy / silver alloy	
	Style	Single	
	Resistance (initial)	Maximum 30 mΩ /JS-E type: maximum 100 mΩ (at 1 A 6 VDC)	
	Rating (resistive)	8 A 250 VAC or 8 A 24 VDC	
	Maximum Carrying Current	10 A	
	Maximum Switching Power	2,000 VA, 192 W	
	Maximum Switching Voltage	400VAC, 150 VDC	
	Maximum Switching Current	10 A	
	Minimum Switching Load*1	10 mA 5 VDC/100 mA 5 VDC	
Coil	Nominal Power (at 20°C)	0.22 to 0.29 W	
	Operate Power (at 20°C)	0.11 to 0.14 W	
	Operating Temperature	-40°C to +85°C (no frost)	
Time Value	Operate (at nominal voltage)	Maximum 10 ms	
	Release (at nominal voltage)	Maximum 5 ms	
Insulation	Resistance (at 500 VDC)	Minimum 1,000 MΩ	
	Dielectric Strength	between open contacts	1,000 VAC 1 minute
		between coil and contacts	5,000 VAC 1 minute
Surge Strength		10,000 V (at 1.2 × 50 μs)	
Life	Mechanical	2 × 10 ⁷ operations minimum	
	Electrical	1 × 10 ⁵ operations minimum (nominal load)	
Other	Vibration Resistance	Misoperation	10 to 55 Hz (double amplitude of 1.65 mm)
		Endurance	10 to 55 Hz (double amplitude of 3.3 mm)
	Shock Resistance	Misoperation	100 m/s ² (11 ±1 ms)
		Endurance	1,000 m/s ² (6 ±1 ms)
Weight		Approximately 8 g	

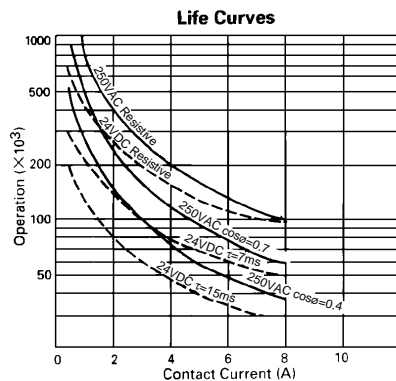
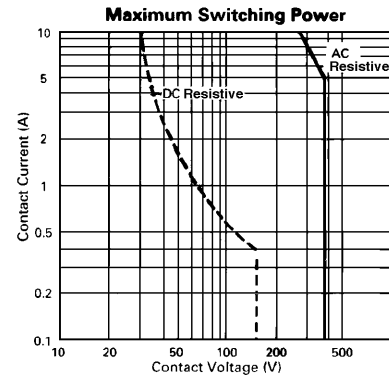
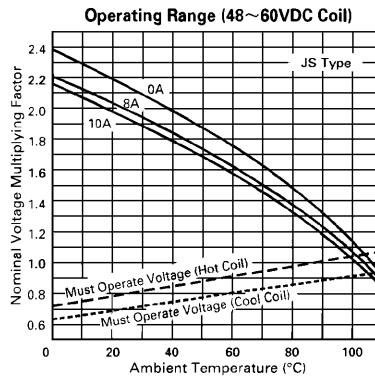
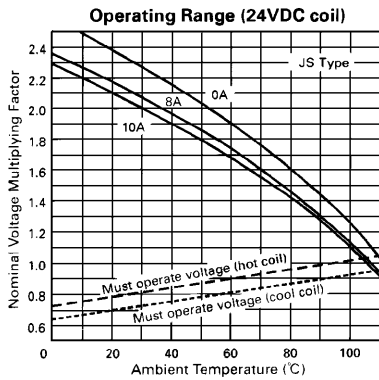
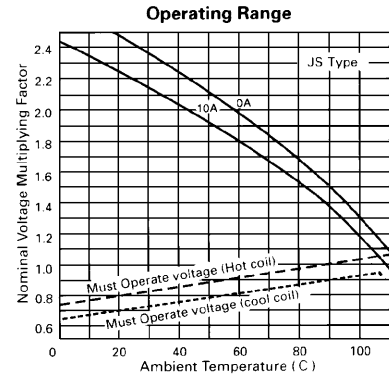
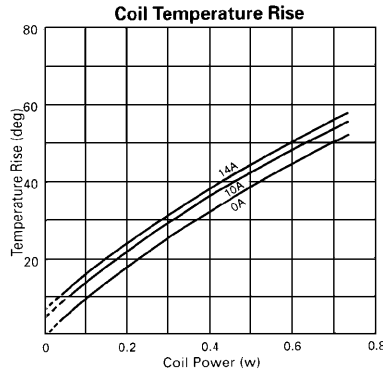
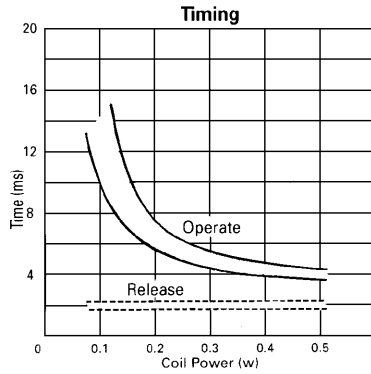
*1 Minimum switching loads mentioned above are reference values. Please perform the confirmation test with the actual load before production since reference values may vary according to switching frequencies, environmental conditions and expected reliability levels.

COIL DATA CHART

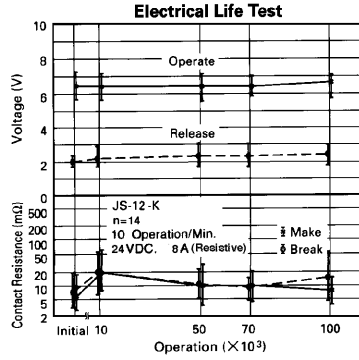
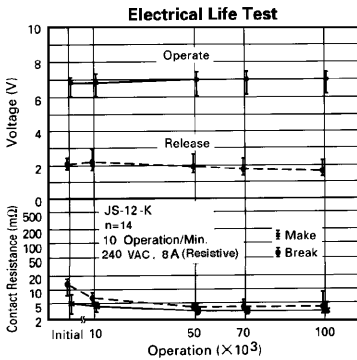
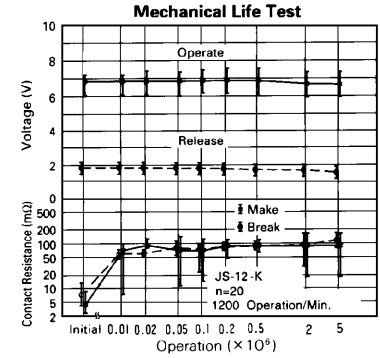
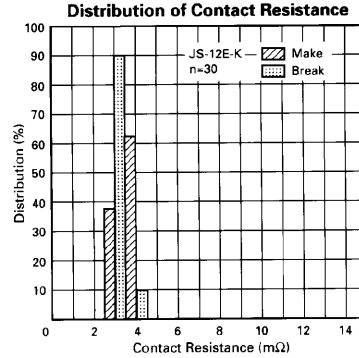
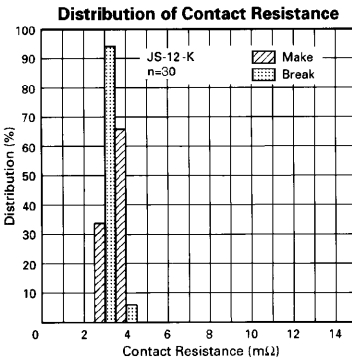
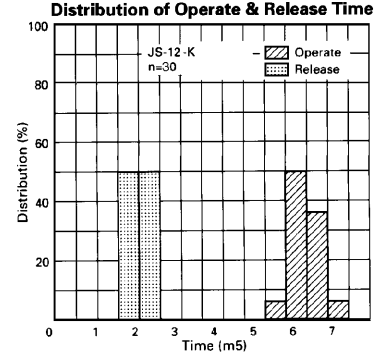
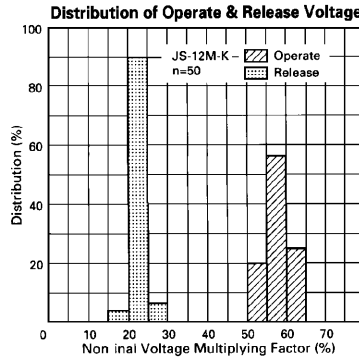
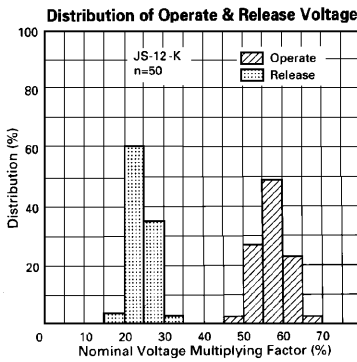
MODEL	Nominal voltage	Coil resistance (±10%)	Must operate voltage	Must release voltage	Nominal power
JS- 5 (M) (E, N) -K (T)	5 VDC	112Ω	3.5 VDC	0.5 VDC	225 mW
JS- 6 (M) (E, N) -K (T)	6 VDC	160Ω	4.2 VDC	0.6 VDC	225 mW
JS- 9 (M) (E, N) -K (T)	9 VDC	360Ω	6.3 VDC	0.9 VDC	225 mW
JS-12 (M) (E, N) -K (T)	12 VDC	660Ω	8.5 VDC	1.2 VDC	220 mW
JS-18 (M) (E, N) -K (T)	18 VDC	1,455Ω	12.7 VDC	1.8 VDC	225 mW
JS-24 (M) (E, N) -K (T)	24 VDC	2,350Ω	16.8 VDC	2.4 VDC	245 mW
JS-48 (M) (E, N) -K (T)	48 VDC	8,000Ω	33.4 VDC	4.8 VDC	290 mW
JS-60 (M) (E, N) -K (T)	60 VDC	12,500Ω	41.7 VDC	6.0 VDC	290 mW

Note : All values in the table are measured at 20°C.

CHARACTERISTIC DATA



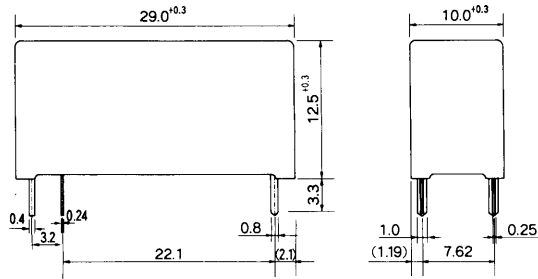
REFERENCE DATA



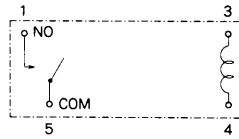
■ DIMENSIONS

● Dimensions

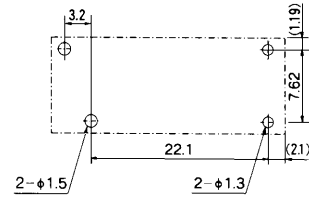
JS-MK type



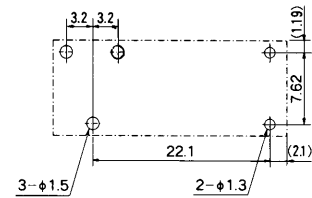
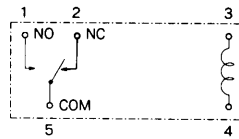
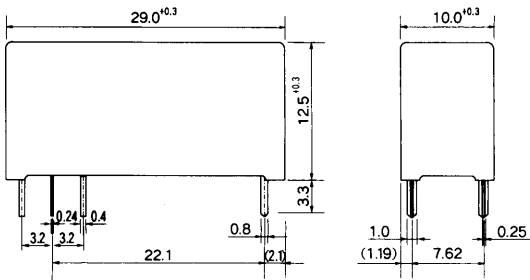
● Schematics (BOTTOM VIEW)



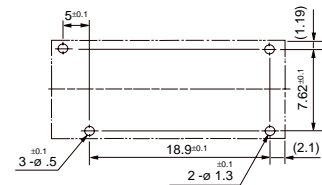
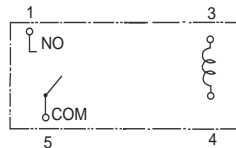
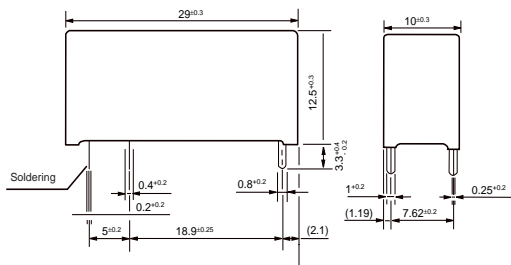
● PC board mounting hole layout (BOTTOM VIEW)



JS-K type



JS-MN-KT type



Unit: mm

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