FUJITSU

POWER RELAY 1 POLE - 8A Polarized Latching Type

JSL Series

FEATURES

- Small footprint
 - Width: 10mm
 - Height: 12.5mm
- High insulation
 - Insulation distance: 8 mm (between coil and contacts)
 - Dielectric strength: 5,000 VAC (between coil and contacts)
 - Surge strength: 10,000 V (between coil and contacts)
- Plastic materials
 - UL 94 flame class V-0
- RoHS compliant. Please see page 6 for more information



PARTNUMBER INFORMATION

_	JSL	D	12	Μ	Ν	-	К
[Example]	(a)	(b)	(c)	(d)	(e)		(f)

(a)	Relay type	JSL	: JSL-Series
(b)	Coil type	Nil D	: 1 coil : 2 coils
(c)	Coil rated voltage	12	: 324 VDC Coil rating table at page 3
(d)	Contact configuration	Nil M	: 1 form C : 1 form A
(e)	Contact material	Ν	: AgSnO ₂ , Au plated
(f)	Sealed type	К	: Wash tight

SPECIFICATION

ltem			JSL (1 coil)	JSL (2 coils)		
Contact Data	Configuration		1 form A, 1 form C			
	Construction		Single			
	Material		AgSnO ₂ + Au plated			
	Resistance (initial)		Max. 100 m Ω at 6VDC, 1A			
	Contact rating (at resistiv	e load)	8A, 250VAC / 24VDC			
	Max. carrying current		10A			
	Max. switching voltage		400VAC / 150VDC			
	Max. switching power		2,000VA / 192W			
	Max. switching current		10A			
	Min. switching load *		100 mA, 5 VDC			
Life	Mechanical	Mechanical		Min. 5 x 10 ⁶ operations		
	Electrical		Min. 50 x 10 ³ operations			
Coil Data	Rated power (at 20 °C)		220mW (24V coil, 250mW) 480mW		
	Operating temperature range		-40 °C to +85 °C (no frost)			
Timing Data	ning Data Set / reset (at nominal coil voltage) Exitation time (at nominal coil voltage)		Max. 10ms (without bounce, without diode)			
			Min. 20ms, max. 1,000m	S		
Insulation	Resistance (initial)		Min. 1,000MOhm at 500VDC			
	Dielectric strength	Open contacts	1,000VAC (50/60Hz) 1mi	n		
		Contacts to coil	5,000VAC (50/60Hz) 1mi	n		
	Surge strength	Coil to contacts	10,000V / 1.2 x 50µs standard wave			
	Clearance		8 mm			
	Creepage		8 mm			
Other	Vibration resistance	Misoperation>1us	10 to 55Hz double amplitude 2 mm			
		Endurance	10 to 55Hz double amplitude 3 mm			
	Shock	Misoperation>1us	Min. 200m/s ² (11 ± 1ms)			
		Endurance	Min. 1,000m/s ² (6 ± 1ms)			
	Weight		Approximately 8 g			

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

COIL RATING

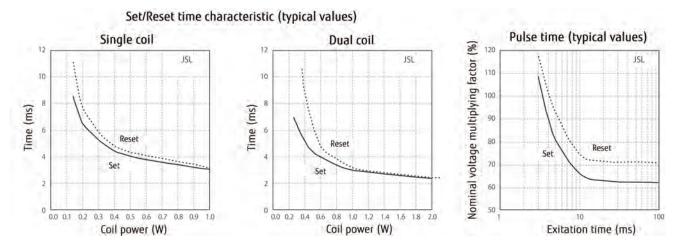
1 coil			2 coils			
Coil Code	Operating range		Coil Resistance	Operatin	g range	Coil Resistance
code	Min. VDC	Max. VDC	+/- 10% (Ohm)	Min. VDC	Max. VDC	+/- 10% (Ohm)
3	2.4	5.4	41	2.4	5.4	19
5	4	9	114	4	9	53
12	9.6	21.2	655	9.6	21.2	300
24	19.2	42.2	2,304	19.2	42.2	1,200

Note: All values in the table are valid for 20°C and zero contact current. * Specified operate values are valid for pulse wave voltage.

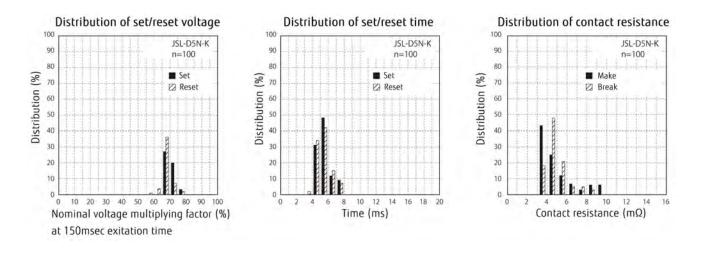
SAFETY STANDARDS

Туре	Compliance	Contact rating
UL	UL 508	Flammability: UL 94-V0 (plastics)
		8A, 24 VDC (resistive) 8A, 250VAC (resistive)
CSA	C22.2 No. 14	
VDE	0435, 0631, 0700	8A, 24VDC (0ms) 8A, 250VAC (cosφ=0)

CHARACTERISTIC DATA



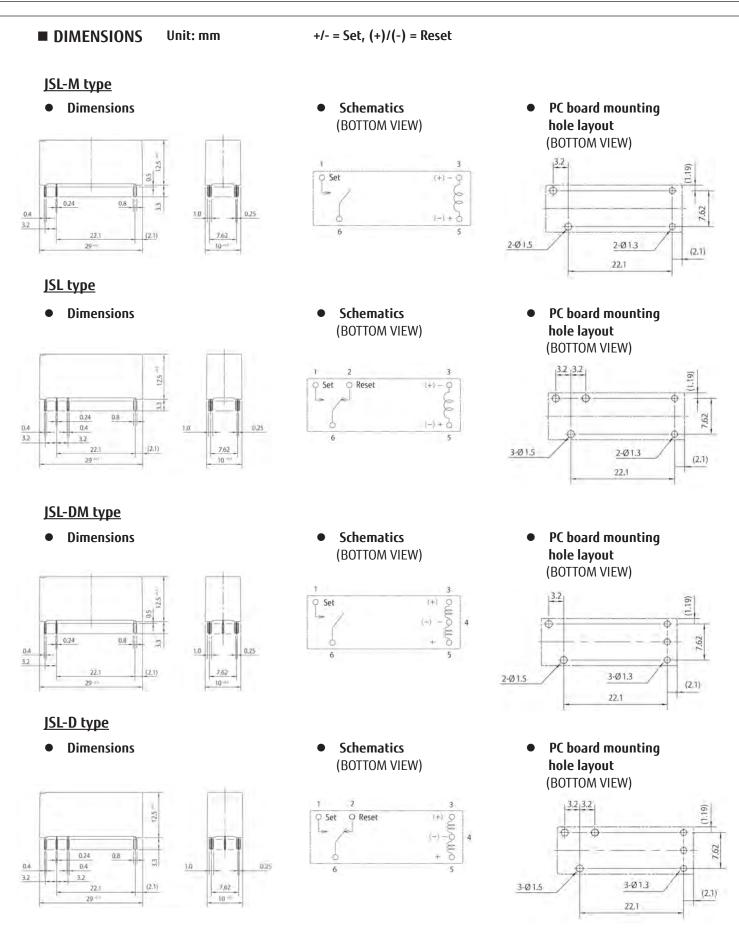
REFERENCE DATA



COIL POLARITY

Version	1 c	oil	2 coils		
Terminal No.	3	5	3	4	5
Set	-	+		-	+
Reset	+	-	+	-	

JSL SERIES



RoHS Compliance and Lead Free Information

1. General Information

- All relays produced by Fujitsu Components are compliant with RoHS directive 2011/65/EU including amendments.
- Cadmium as used in electrical contacts is exempted from the RoHS directives. As per Annex III of directive 2011/65/EU.
- All relays are lead-free. Please refer to Lead-Free Status Info for older date codes at: http://www.fujitsu.com/downloads/MICRO/fcai/relays/lead-free-letter.pdf
- Lead free solder plating on relay terminals is Sn-3.0Aq-0.5Cu, unless otherwise specified. • This material has been verified to be compatible with PbSn assembly process.

2. Recommended Lead Free Solder Condition

Recommended solder Sn-3.0Ag-0.5Cu.

Flow Solder Condition:

Pre-heating: maximum 120°C within 9 sec. Soldering: dip within 5 sec. at 255°C ± 5°C solder bath Relay must be cooled by air immediately after soldering

Solder by Soldering Iron:

Soldering Iron 30-60W Temperature: Duration:

maximum 350-360°C maximum 3 sec.

We highly recommend that you confirm your actual solder conditions

3. Moisture Sensitivity

Moisture Sensitivity Level standard is not applicable to electromechanical relays, unless otherwise indicated.

4. Tin Whiskers

Dipped SnAgCu solder is known as presenting a low risk to tin whisker development. No considerable length whisker was found by our in house test.

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