

RJ Power Relay

- 1 Form A
- Rated current: 5 to 10 A
- 200 mW sensitive coil
- Dielectric strength between coil & contact: 4000 V AC
- Class F coil insulation
- Meets IEC 60079-15 Anti-explosion Standard



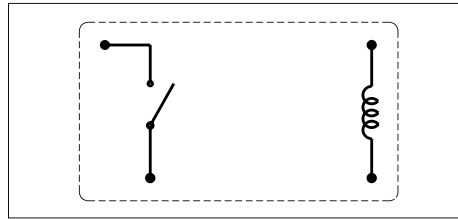
RJ

1 Form A, 5 A



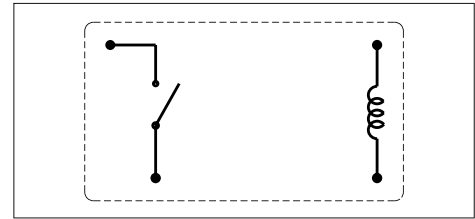
RJ

1 Form A, 8 A



Technical parameters

Coil data		
Coil input voltage		5/9/12/24 V DC
Coil power		D Type: 450 mW, L Type: 200 mW
Response voltage		< 75% (Room temp.)
Drop out voltage		> 5% (Room temp.)
Operation time / Release time		Less than 8 ms / less than 5 ms
Contact data		
Contact numbers		1 Form A
Contact material		Ag alloy
Max. switching voltage		30 V DC, 277 V AC
Max. switching power		2,770 VA
Contact ratings		5 A 250 V AC, 1/3HP 240 V AC, 5 A 277 V AC, 1/6HP 277 V AC
Contact resistance		Max. 100 mΩ (1 A/ 6 V DC)
Mechanical service life		1×10 ⁷ times
Electrical Service life	AC1	1×10 ⁵ times
General data		
Rated withstand impulse voltage	Coil / Contact	4 kV AC / 1 min
	Between contacts	1 kV AC / 1 min
Surge voltage		6 kV AC (1.2/50 μs)
Insulation Resistance		1,000 MΩ (500 V DC)
Vibration		Malfunction 10~55 Hz (Amplitude 1.5 mm) Endurance 10~55 Hz (Amplitude 1.5 mm)
Shock		Malfunction 98 m/s ² Endurance 980 m/s ²
Ambient temperature (Operation)		-40~105 °C (No condensation)
Operating humidity		20~85%
Dimension L×W×H (mm)		18.2×10.2×15.5
Enclosure type		Flux-proof, sealed
Mounting		PCB
Weight (g)		6
Compliance certification number		cULus:E345228, TUV:R50222701, CQC:CQC10002052739



Technical parameters

Coil input voltage	5/9/12/24 V DC
Coil power	D Type: 450 mW, L Type: 200 mW
Response voltage	< 75% (Room temp.)
Drop out voltage	> 5% (Room temp.)
Operation time / Release time	Less than 8 ms / less than 5 ms
Contact numbers	1 Form A
Contact material	Ag alloy
Max. switching voltage	30 V DC, 277 V AC
Max. switching power	2,770 VA
Contact ratings	8 A 250 V AC, 8 A 277 V AC
Contact resistance	Max. 100 mΩ (1 A/ 6 V DC)
Mechanical service life	1×10 ⁷ times
Electrical Service life	1×10 ⁵ times
Rated withstand impulse voltage	4 kV AC / 1 min
Surge voltage	1 kV AC / 1 min
Insulation Resistance	6 kV AC (1.2/50 μs)
Vibration	1,000 MΩ (500 V DC)
Shock	Malfunction 10~55 Hz (Amplitude 1.5 mm) Endurance 10~55 Hz (Amplitude 1.5 mm)
Ambient temperature (Operation)	Malfunction 98 m/s ² , Endurance 980 m/s ²
Operating humidity	-40~105 °C (No condensation)
Dimension L×W×H (mm)	20~85%
Enclosure type	18.2×10.2×15.5
Mounting	Flux-proof, sealed
Weight (g)	PCB
Compliance certification number	6
	cULus:E345228, TUV:R50222701, CQC:CQC10002052739

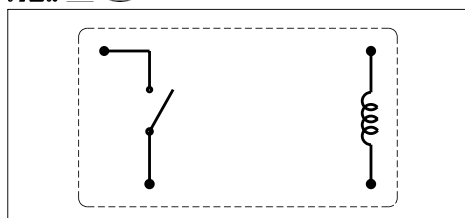
Type designation

Model designation	Construction type	Number of poles	Coil voltage	Coil power	Contact configuration	Contact rating	Contact material	Insulation class	Enclosure type	Special request
RJ	-SS	-1	12	D	M	1	*	-F	-S	XXX
RJ	SS: Flux-proof	1: 1 pole	05: 5 V 09: 9 V 12: 12 V 24: 24 V 36: 36 V 48: 48 V (36, 48 only for AgNi)	D: 450 mW L: 200 mW	M: 1 Form A	Blank: 5 A 1: 10 A 2: 8 A	Blank: AgSnO ₂ 4: AgNi	Blank: class A F: class F	Blank: flux-proof S: sealed	335: Stands for product in accordance with IEC 60335-1 (GWT)



RJ

1 Form A, 10 A



Technical parameters

5/9/12/24 V DC

D Type: 450 mW, L Type: 200 mW

< 75% (Room temp.)

> 5% (Room temp.)

Less than 8 ms / less than 5 ms

1 Form A

Ag alloy

30 V DC, 277 V AC

2,770 VA

10 A 250 V AC, 1/3HP 240 V AC, 5 A 30 V DC, 10 A 277 V AC

Max. 100 mΩ (1 A / 6 V DC)

1×10⁷ times

1×10⁵ times

4 kV AC / 1 min

1 kV AC / 1 min

6 kV AC (1.2/50 μs)

1,000 MΩ (500 V DC)

Malfunction 10~55 Hz (Amplitude 1.5 mm)

Endurance 10~55 Hz (Amplitude 1.5 mm)

Malfunction 98 m/s², Endurance 980 m/s²

-40~105 °C (No condensation)

20~85%

18.2×10.2×15.5

Flux-proof, sealed

PCB

6

cULus:E345228, TUV:R50222701, CQC:CQC10002052739

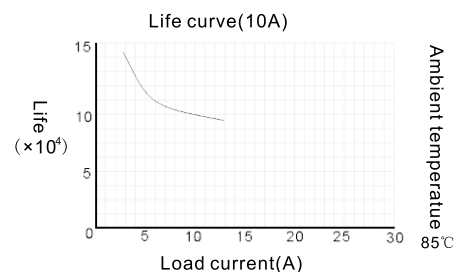
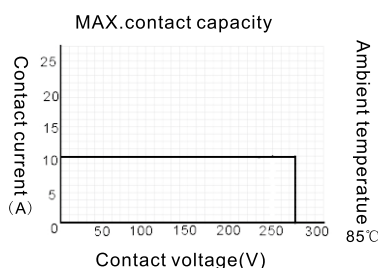
SSA approval rating

cULus				5A/30VDC (Resistive)			
(DM1)	10A/250VAC (Resistive)	85 °C / 105 °C	100,000ops	(DM2)	8A/250VAC (Resistive)	85 °C / 105 °C	100,000ops
	10A/277VAC (Resistive)	105 °C	100,000ops		8A/277VAC (Resistive)	105 °C	100,000ops
	1/3HP/240/277VAC (HP)	65 °C	30,000ops	(LM)	1/4HP/240VAC (HP)	65 °C	30,000ops
	5A/30VDC (Resistive)	65 °C	80,000ops		3A/30VDC (Resistive)	65 °C	80,000ops
(LM1)	10A/250VAC (Resistive)	105 °C	100,000ops	TUV			
	10A/277VAC (Resistive)	105 °C	100,000ops	(DM1/LM1)	10A/250VAC	105 °C	100,000ops
(LM2)	8A/250VAC (Resistive)	105 °C	100,000ops	(DM/LM)	5A/250VAC	85 °C	100,000ops
	8A/277VAC (Resistive)	105 °C	100,000ops	(DM2/LM2)	8A/250VAC	105 °C	100,000ops
(DM/LM)	5A/250VAC (Resistive)	85 °C / 105 °C	100,000ops	CQC			
	5A/277VAC (Resistive)	105 °C	100,000ops	(DM1)	10A/250VAC	85 °C	100,000ops
	1/6HP/277VAC (HP)	105 °C	100,000ops	(DM/LM)	5A/250VAC	85 °C	100,000ops
(DM)	1/3HP/240VAC (HP)	65 °C	30,000ops	(DM2/LM2)	8A/250VAC	85 °C	100,000ops

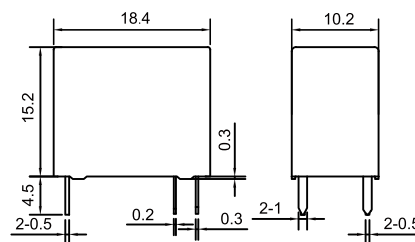
Coil rating

Rated voltage (VDC)	Rated current (mA)		Coil resistance (Ω±10%)		Operating power (mW)		Operating voltage (VDC)	Release voltage (VDC)
	L type	D type	L type	D type	L type	D type		
5	40	89	125	56	200	450	≤3.75	≥0.25
9	22.2	50	405	180	200	450	≤6.75	≥0.45
12	16.7	37.5	720	320	200	450	≤9.00	≥0.60
24	8.3	18.8	2,880	1,280	200	450	≤18.00	≥1.20

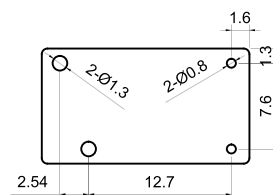
MAX. allowable coil voltage: 130% of rated coil voltage (Room temperature)



Outline dimensions



PCB board layout (Bottom view)



Tolerance	
Outline dimension	
<1mm	±0.2mm
1~5mm	±0.3mm
>5mm	±0.4mm
PCB board layout	
Pitch-row	±0.1mm
Aperture	+0.1mm