

# Automotive Relay SRJ



- 40A continuous current at 85 °C
- SPNO and SPCO arrangement
- Plug-in or PC board terminals
- Optional mounting bracket
- Sealed Construction



## Options and ordering codes

<b>SRJ</b>	<b>H</b>	<b>1A</b>	<b>C</b>	<b>SL</b>	<b>R</b>	<b>12VDC</b>
Capacity						Coil Voltages
Standard (AgNi)						
High Power (AgSnO <sub>2</sub> )	<b>H</b>					
Contact Form						Options
SPNO		<b>1A</b>				Standard
SPCO		<b>1C</b>				<b>R</b> Parallel resistor (6V-180Ω, 12V-680Ω, 24V-2700Ω)
						<b>D1</b> Parallel diode (anode pin 86)
						<b>D2</b> Parallel diode (anode pin 85)
Construction						
QC Terminal		<b>CA</b>		<b>S</b>	Sealed	
PCB Terminals		<b>CB</b>		<b>L</b>	RoHS Compliant	
Shrouded Terminals		<b>S</b>				
Plastic bracket		<b>C1</b>				
Steel bracket		<b>C1S</b>				

## Contact Data

Contact Arrangement	1A	1C
Initial contact resistance	Max.100mΩ (at 1A/6VDC)	
Contact Material	AgNi, AgSnO <sub>2</sub>	
Contact Rating	14VDC 40A	14VDC 30A (NO)/20A (NC) H: 40A (NO)/30A (NC)
Max. Carry current	60A	60A (NO)/40A(NC)
Max. Continuous current	60A	60A (NO)/40A(NC)
Max. Make current <sup>(1)</sup>	120A	120A (NO)/45A(NC)
Min.Applicable load	6VDC, 100mA	
Mechanical life	1x10 <sup>7</sup> OPS	
Electrical life	1x10 <sup>5</sup> OPS	

Note: Inrush current for lamp load

## Characteristics

Initial Insulation Resistance	100MΩ @ 500VDC	
Dielectric Strength	Between coil & contact	500VAC
	Between open contacts	500VAC
Operate time (at nomi. Volt)	Max. 7ms	
Release time (at nomi. Volt)	Max. 5ms	
Shock resistance	Functional	100m/s <sup>2</sup>
	Destructive	200m/s <sup>2</sup>
Vibration resistance	1.5mm, 10 to 40Hz	
Ambient temperature	-40 °C to + 85 °C	
Storage temperature	-40 °C to + 155 °C	
Termination	QC & PCB	
Weight	35g/55g	
Construction	Sealed	

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## Coil Data

at 23°C

	Nominal Voltage VDC	Pick-up Voltage VDC	Drop-out Voltage VDC	Coil resistance $\Omega$	Parallel <sup>(1)</sup> resistance $\Omega \pm 5\%$	Equivalent resistance $\Omega \pm 10\%$	Power consumption W	Max. allowable <sup>(2)</sup> overdrive voltage VDC	
								23°C	85°C
Shrouded	6	3.6	0.6	22	-	-	1.6	10.1	7.9
	6	3.6	0.6	22	180	19.6	1.8	10.1	7.9
	12	7.2	1.2	90	-	-	1.6	20.2	15.7
	12	7.2	1.2	90	680	79.5	1.8	20.2	15.7
	24	14.4	2.4	360	-	-	1.6	40.5	31.5
	24	14.4	2.4	360	2700	317.6	1.8	40.5	31.5
Others	6	3.9	0.6	22	-	-	1.6	10.1	7.9
	6	3.9	0.6	22	180	19.6	1.8	10.1	7.9
	12	7.8	1.2	85	-	-	1.7	20.2	15.7
	12	7.8	1.2	85	680	75.6	1.9	20.2	15.7
	24	15.6	2.4	350	-	-	1.6	40.5	31.5
	24	15.6	2.4	350	2700	309.8	1.9	40.5	31.5

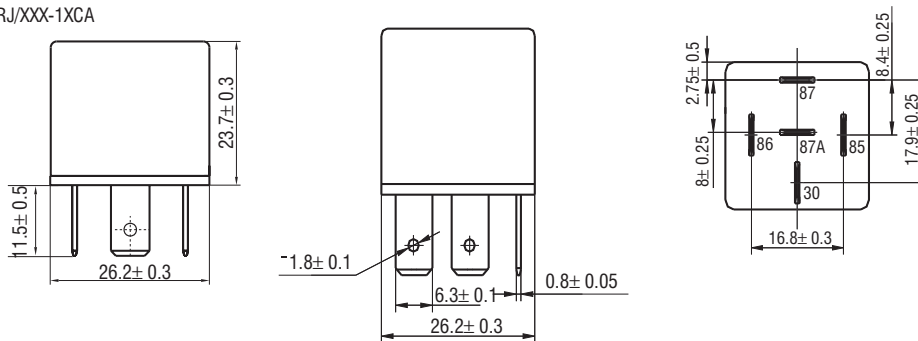
(1) The power consumption of parallel resistance is 0.5W

(2) Max. allowable overdrive voltage is stated with no load applied, illustrated with dust cover version

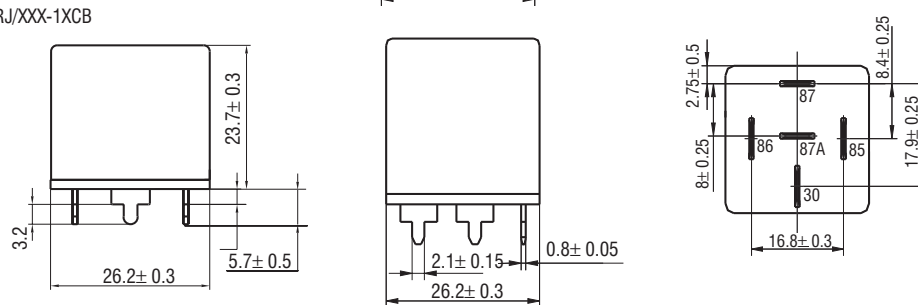
## Outline dimensions (mm)

### Wiring diagram and PC Board layout

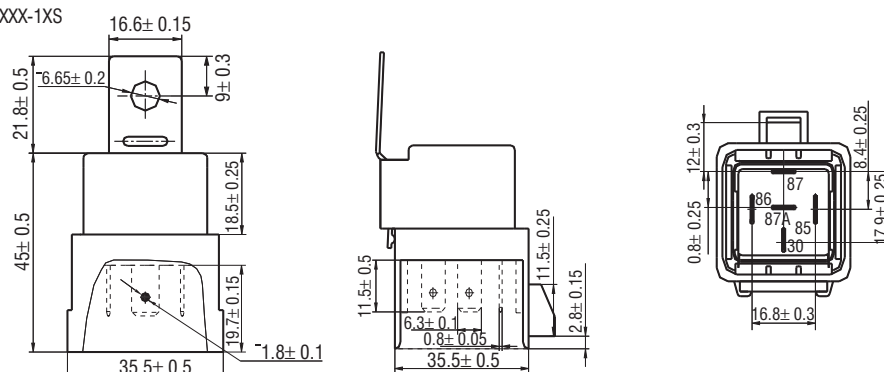
SRJ/XXX-1XCA



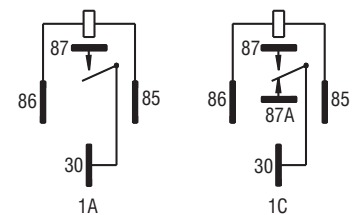
SRJ/XXX-1XCB



SRJ/XXX-1XS



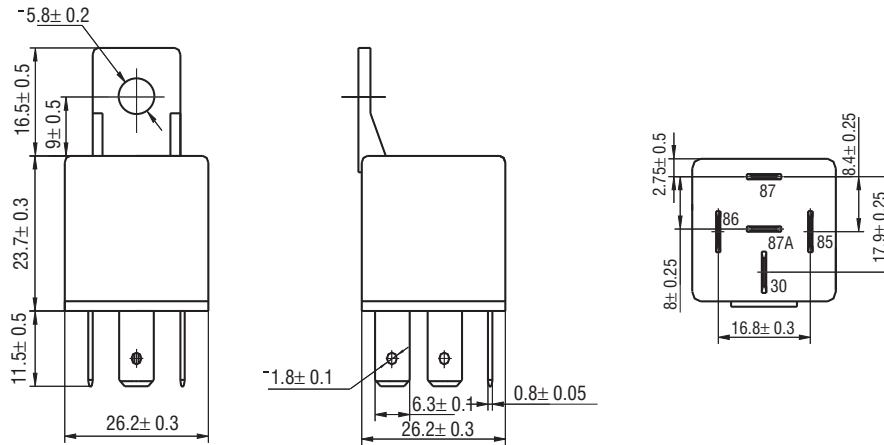
Wiring Diagram



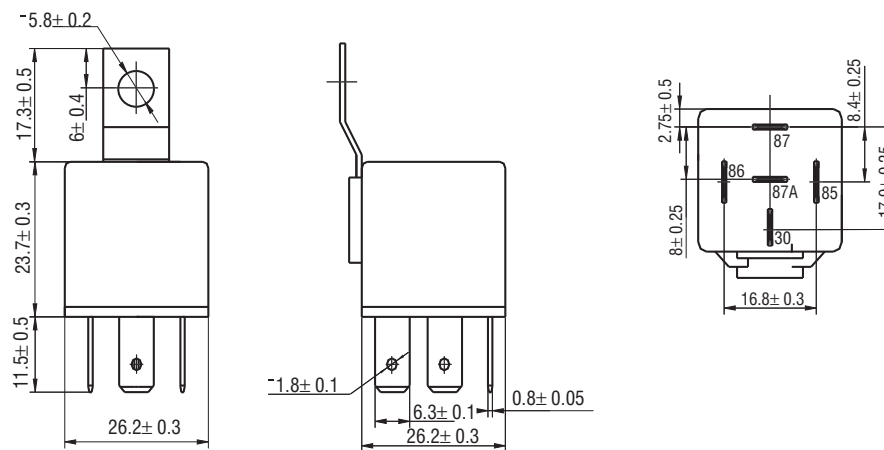
## Outline dimensions (mm)

Wiring diagram and PC Board layout

SRJ/XXX-1XC1



SRJ/XXX-1XC1S



## Characteristic Curve

