

9419 AUTOMOTIVE RELAY

SUBMINIATURE HIGH POWER RELAY

- ◆ 40A switching capability
- ◆ American and European sealed mode available.
Open and sealed type available



Contact Data

Contact Arrangement	1A 1B 1C
Contact Resistance	100mΩ(1A 6VDC)
Contact Material	AgSnO ₂ , AgCdO, AgNi alloy
Contact Rating	NC:30A (85°C , 8H) NO:40A (85°C , 16H)
Max. Switching Voltage	28VDC
Max. Switching Current	40A
Max. Switching Power	1260W
Mechanical Endurance	1*10 ⁷ ops
Electrical Endurance	1*10 ⁵ ops (30A 250VAC)

Characteristics

Insulation Resistance	50MΩ(500VDC)	
Dielectric Strength b/w	Coil&Contacts	500VAC 50/60Hz 1min
	Open Contacts	500VAC 50/60Hz 1min
Shock Resistance	Functional	98m/s ² (10G)
	Destructive	980m/s ² (100G)
Vibration Resistance	10Hz~55Hz 1.5mm DA	
Humidity	≤85% (at35°C) (Sealed)	
Ambient Temperature	-40°C~85°C	
Termination	PCB	
Unit Weight	Approx. 22g	

Coil Data 1.2W

The parameters listed are the initial values measured in the standard state, if the environmental state changes will have an impact on the actual parameters The standard state is: temperature: 23°C±5°C, humidity: 25%-75%

Nominal Voltage (VDC)		Coil Resistance (Ω±10%)	Pick-up Voltage VDC Nominal Voltage	Drop-out Nominal	Coil Power (W)	Pick-up Time (ms)	Drop-out Time (ms)
Nominal	Max. (at85°C)						
6	7.8	30	4.50	0.60	1.2	≤5	≤4
9	11.7	67.5	6.75	0.90			
12	15.6	120	9.00	1.20			
24	31.2	480	18.00	2.40			

Coil Data 1.6W

The parameters listed are the initial values measured in the standard state, if the environmental state changes will have an impact on the actual parameters The standard state is: temperature: 23°C±5°C, humidity: 25%-75%

Nominal Voltage (VDC)		Coil Resistance (Ω±10%)	Pick-up Voltage VDC Nominal Voltage	Drop-out Nominal	Coil Power (W)	Pick-up Time (ms)	Drop-out Time (ms)
Nominal	Max. (at85°C)						
6	7.8	22.5	3.60	0.60	1.6	≤5	≤4
9	11.7	50	5.40	0.90			
12	15.6	90	7.20	1.20			
24	31.2	360	14.40	2.40			

Soldering Conditions

Wave Soldering	260±5°C 3-5s (sec)
Soldering Resistance	Must be free from any abnormality in both the constriction and characteristics after the terminals are dipped into solder at 260±5°C for 10 seconds and 350±5°C for 3 seconds and then left in room temperature and humidity for 2 hours

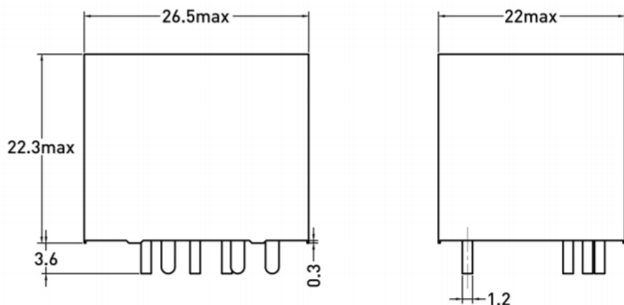
► Ordering Information

	9419	N	- 12VDC	- SL	- 1	A	U
Type							
Coil Power	N : 1.6W Nil : 1.2W						
Coil Voltage	6, 9, 12, 24						
Construction	SL : Plastic Sealed Nil : Flux Proofed						
Pin	1 : Short Pin Nil : Long Pin						
Contact Form	A: 1 Form A B: 1 Form B C: 1 Form C						
Version	U : American Plastic Sealed Mode E : European Plastic Sealed Model						

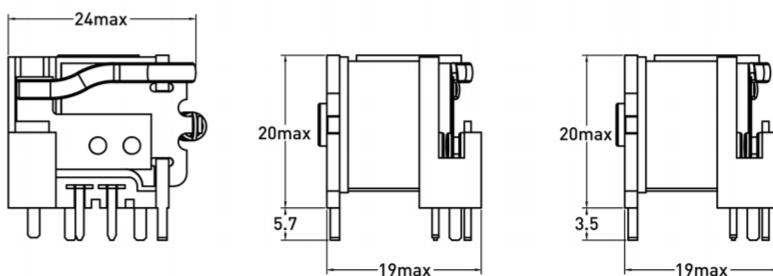
- *1) We suggest to choose plastic sealed types and validate it in real application for an unclean environment (with contaminations like H₂S, SO₂, NO₂, dust, etc), and verified by using it in real situations ;
- 2) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB ;
- 3) AgSnO₂ material contacts are recommended for application scenarios where capacitive loads, lamp loads, motor load lamps generate high inrush currents at the moment of relay turn-on ;
- 4) If customers have any special requirements, they need to contact our company for evaluation and then choose the corresponding product type according to the characteristics.

► Outline Dimensions, PCB Layout and Wiring Diagram (Unit : mm)

With Shell



Without Shell

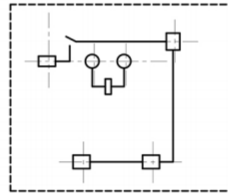
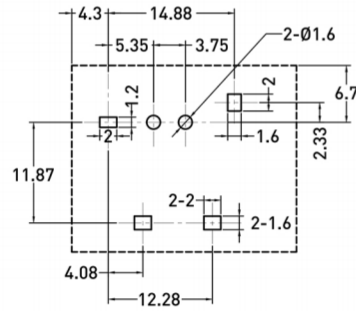


► Outline Dimensions, PCB Layout and Wiring Diagram (Unit : mm)

American Plastic Sealed Mode

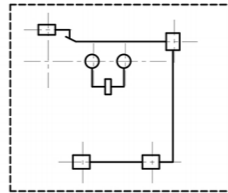
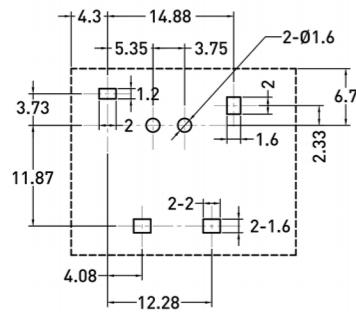
1 Form A: PCB Layout

Wiring Diagram



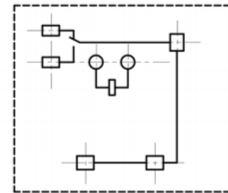
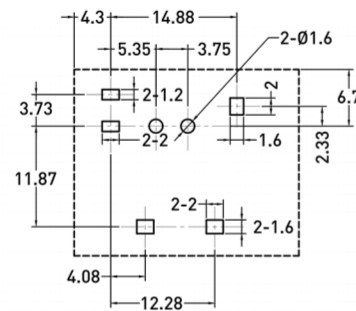
1 Form B: PCB Layout

Wiring Diagram



1 Form C: PCB Layout

Wiring Diagram

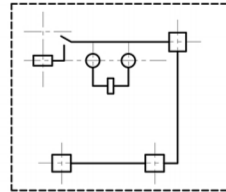
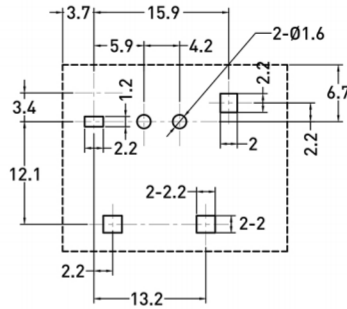


► Outline Dimensions, PCB Layout and Wiring Diagram (Unit : mm)

European Plastic Sealed Mode

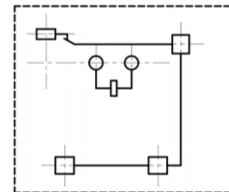
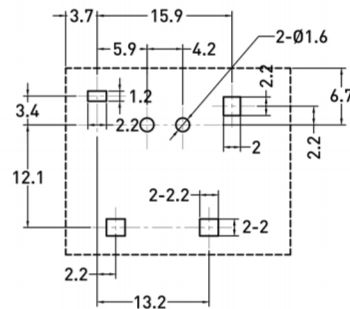
1 Form A: PCB Layout

Wiring Diagram



1 Form B: PCB Layout

Wiring Diagram



1 Form C: PCB Layout

Wiring Diagram

