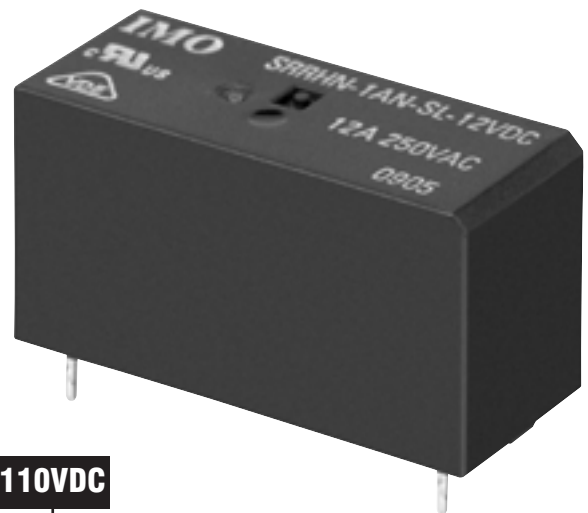


Miniature High Power Relay SRRHN/SRP



- Low height 15.7mm
- 16A switching capabilities
- 1 & 2 pole configuration
- 5KV dielectric coil to contacts
- Creepage distance 10mm
- Sealed & Flux-Tight construction



Options and ordering codes

| | | | | | | | | | | | | |
|----------------------|---|------------|--|-----------|---|--------------------|------------|----------------|--|----------|---|---------------|
| SRRHN/SRP | - | 1C | | T | - | S | | L | | F | - | 110VDC |
| SRRHN | | | | | | | | | | | | Coil Voltage |
| 12A Single Pole | | | | | | | | | | | | |
| 8A Double Pole | | | | | | | | | | | | |
| SRP | | | | | | | | | | | | |
| 16A Single Pole | | | | | | | | | | | | |
| Contact Form | | | | | | | | | | | | |
| SPNO | | 1A | | | | | | | | | | |
| SPNC | | 1B | | | | | | | | | | |
| SPCO | | 1C | | | | | | | | | | |
| DPNO | | 2A | | | | | | | | | | |
| DPNC | | 2B | | | | | | | | | | |
| DPCO | | 2C | | | | | | | | | | |
| Contacts | | | | | | | | | | | | |
| SPNO 5mm Pin Spacing | | 1A1 | | N | | AgNi | | | | | | |
| SPNC 5mm Pin Spacing | | 1B1 | | N1 | | AgNi + Au plated | | | | | | |
| SPCO 5mm Pin Spacing | | 1C1 | | T | | AgSnO ₂ | | | | | | |
| Sealing | | | | | | | | | | | | |
| | | | | | | F | Flux-Tight | | | | | |
| | | | | | | S | Sealed | | | | | |
| Insulation | | | | | | | | | | | | |
| | | | | | | | NIL | B Class | | | | |
| | | | | | | | F | F Class | | | | |
| RoHS Compliant | | | | | | | | | | | | |
| | | | | | | | L | RoHS Compliant | | | | |

Contact Data

| | | |
|---------------------------------|-----------------------|-----------------|
| Contact Arrangement | 1A, 1B, 1C | 2A, 2B, 2C |
| Initial contact resistance max. | 50mΩ (at 1A 6VDC) | |
| Contact Material | See ordering info | |
| Contact Rating (Res. Load) | 12A/16A 250VAC/24VDC | 8A 250VAC/24VDC |
| Max. switching voltage | 440VAC/125VDC | |
| Max. switching current | 12A/16A | 8A |
| Max. switching power | 3000VA/4000VA | 2000VA |
| Mechanical Life | 1x10 ⁷ OPS | |
| Electrical Life | 1x10 ⁵ OPS | |

Coil Data

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Max. allowable Voltage (at 25°C) | Coil Resistance Ω |
|---------------------|---------------------|----------------------|----------------------------------|-------------------|
| 5 | 3.50 | 0.5 | 7.5 | 62±10% |
| 6 | 4.20 | 0.6 | 9.0 | 90±10% |
| 9 | 6.30 | 0.9 | 13.5 | 202±10% |
| 12 | 8.40 | 1.2 | 18 | 360±10% |
| 18 | 12.60 | 1.8 | 27 | 810±10% |
| 24 | 16.80 | 2.4 | 36 | 1,440±10% |
| 48 | 33.60 | 4.8 | 72 | 5,760±10% |
| 60 | 42.00 | 6.0 | 90 | 7,500±10% |
| 110 | 77.00 | 11.0 | 165 | 25,200±10% |

Characteristics

| | | |
|---|-------------------------|----------------------------|
| Initial Insulation Resistance | | 1000MΩ @ 500VDC |
| Dielectric Strength | Between coil & contacts | 5,000VAC 1min. |
| | Between open contacts | 1,000VAC 1min. |
| | Between contact sets | 2,500VAC 1min. |
| Surge voltage between coil and contacts | | 10KV (1.2x 50μs) |
| Operate time (at nomi. Volt) | | Max. 15ms |
| Release time (at nomi. Volt) | | Max. 8ms |
| Temperature rise (at nomi. Volt) | | 55°C |
| Shock resistance | Functional | 100m/s ² |
| | Destructive | 1000m/s ² |
| Vibration resistance | | 10 to 150Hz 10g/5g |
| Humidity | | 35% to 85% |
| Ambient temperature | | -40°C to +85°C |
| Termination | | PCB |
| Unit Weight | | 13.5g |
| Construction | | Sealed IP67 and Flux-Tight |

Coil

| | |
|------------|------|
| Coil power | 0.4W |
|------------|------|

Miniature High Power Relay SRRHN/SRP



Safety Approval Ratings UL

| | | |
|--------------------------|--------------------------------------|------------|
| AgSnO ₂ | 1 Pole 3.5 and 5mm Pin Pitch (SRRHN) | 12A 277VAC |
| AgNi | 1 Pole 3.5 and 5mm Pin Pitch (SRRHN) | 12A 277VAC |
| AgSnO ₂ | 1 Pole 5mm Pin Pitch (SRP) | 16A 277VAC |
| AgNi | 1 Pole 5mm Pin Pitch (SRP) | 16A 277VAC |
| AgSnO ₂ /AgNi | 2 Pole (SRRHN) | 8A 277VAC |

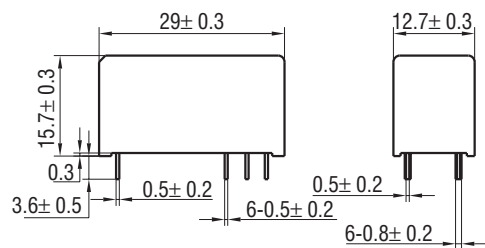
Safety Approval Ratings VDE

| | | |
|--------------------|---------------------|-------------------------------|
| AgNi | SRRHN-(2A/2C)N-(,S) | 5A 400VAC at 85°C |
| | | 8A 250VAC at 85°C |
| AgNi | SRP-(1A1,1C1)N-(,S) | 9A 250VAC cos phi=0.4 at 70°C |
| | 16A 250VAC | at 85°C |
| AgSnO ₂ | SRRHN-1A N-(,S) | 12A 250VAC at 85°C |
| | | 10A 250VAC at 85°C |
| AgSnO ₂ | SRRHN-(1A/1C)T-(,S) | 12A 250VAC at 85°C |
| | SRP-(1A1,1C1)T-(,S) | 16A 250VAC at 85°C |
| | | 9A 250VAC cos phi=0.4 at 70°C |
| | SRRHN-(2A,2C)T-(,S) | 8A 250VAC at 85°C |

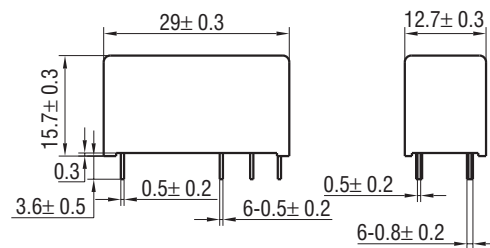
Outline dimensions (mm)

Wiring diagram and PC Board layout

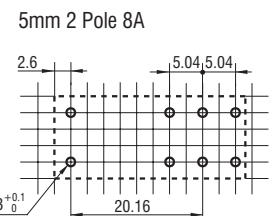
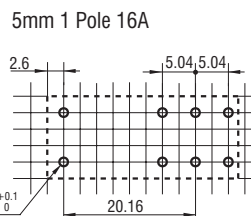
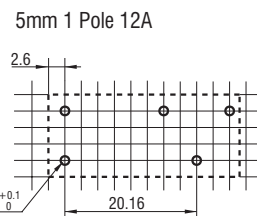
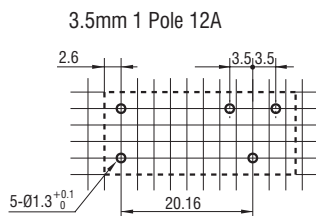
3.5mm Pinning SRRHN-1 x



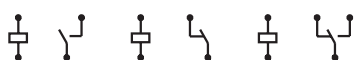
5mm Pinning SRRHN-1x1, SRRHN-2, SRP-1x1



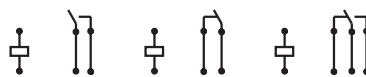
PCB layout (T=2.52±0.02mm)



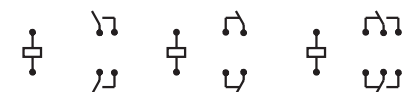
3.5/5mm 1 Pole 12A SRRHN-1 x
SRRHN-1 x 1



5mm 1 Pole 16A SRP-1 x 1



5mm 2 Pole 8A SRRHN-2 x



Characteristic Curve

