# RSM957N

## subminiature signal relays



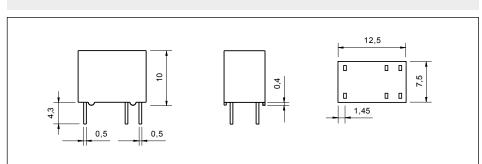
Contact data

- Subminiature monostable relays
- DC coils sensitive of up to 24 V DC, low coil power 0,15 W
- For PCB
- · Sealed, for wave soldering and cleaning
- Small dimensions, light weight
- Applications: for telecommunication devices, household electrical appliance, office equipment, etc.
- Recognitions, certifications, directives: RoHS, Palus [III

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Number and type of contacts	1 CO			
Contact material	Ag/Au flash gold plating			
Rated / max. switching voltage AC	125 V / 220 V			
Min. switching voltage	6 V			
Rated load AC1	0,5 A / 125 V AC			
DC1	1 A / 30 V DC			
Min. switching current	50 mA			
Rated current	1 A			
Max. breaking capacity AC1	62,5 VA			
Contact resistance	≤ 100 mΩ			
Coil data				
Rated voltage DC	3, 5, 6, 9, 12, 24 V			
Must release voltage	DC: ≥ 0,1 U <sub>n</sub>			
Operating range of supply voltage	see Table 1			
Rated power consumption DC	0,15 W			
Insulation according to EN 60664-1				
Insulation resistance	> 1 000 MΩ 500 V DC, 60 s			
Dielectric strength				
<ul> <li>between coil and contacts</li> </ul>	1 000 V AC type of insulation: basic			
contact clearance	400 V AC type of clearance: micro-disconnection			
Contact - coil distance				
clearance	≥ 0,6 mm			
• creepage	≥ 0,6 mm			
General data				
Operating / release time (typical values)	5 ms / 5 ms			
Electrical life (number of cycles)				
• resistive AC1 1 800 cycles/hour	10 <sup>5</sup> 0,5 A, 125 V AC			
• resistive DC1 1 800 cycles/hour	10 <sup>5</sup> 1 A, 30 V DC			
Mechanical life 18 000 cycles/hour	5 x 10 <sup>6</sup>			
Dimensions (L x W x H)	12,5 x 7,5 x 10 mm			
Weight	2,2 g			
Ambient temperature				
(non-condensation and/or icing) • operating	-30+70 °C			
Cover protection category	IP 67 EN 60529			
Environmental protection	RTIII EN 61810-7			
Shock resistance	10 g			
Vibration resistance	3,3 mm DA (constant amplitude) 1055 Hz			
Solder bath temperature	max. 260 °C			
Soldering time	max. 5 s			

The data in bold type relate to the standard versions of the relays.

#### **Dimensions**



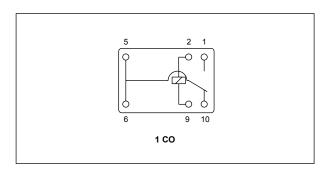


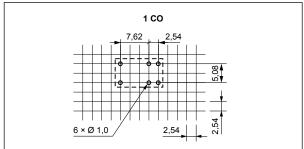
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#### Connection diagram (pin side view)

#### Pinout (solder side view)





#### Mounting

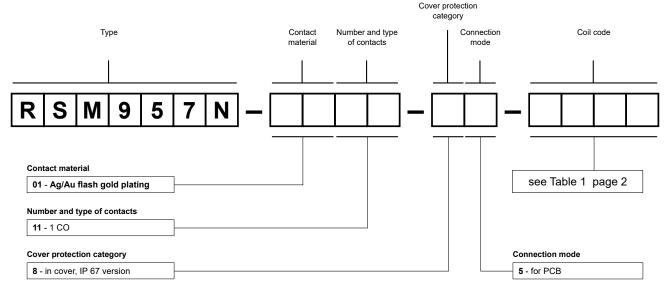
Relays RSM957N are designed for direct PCB mounting.

#### Coil data - DC voltage version, sensitive

Table 1

Coil code Rated voltage V DC		Coil resistance at 20 °C Ω	Acceptable resistance	Coil operating range V DC	
				min. (at 20 °C)	max. (at 20 °C)
S003	3	60	± 10%	2,4	6
S005	5	166,7	± 10%	4,0	10
S006	6	240	± 10%	4,8	12
S009	9	540	± 10%	7,2	18
S012	12	960	± 10%	9,6	24
S024	24	3 840	± 10%	19,2	48

#### **Ordering codes**



#### Example of ordering code:

### RSM957N-0111-85-S005

relay **RSM957N**, for PCB, one changeover contact, contact material Ag/Au flash gold plating, sensitive coil voltage 5 V DC, in cover IP 67

#### PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.

22.02.2018