

# RSM957N

## subminiature - signal relays



- Signal 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,  

### Contact data

Number and type of contacts		1 CO
Contact material		<b>Ag/Au flash gold plating</b>
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

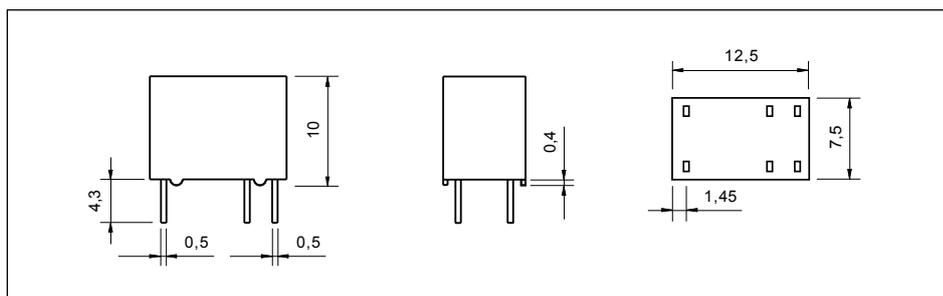
Insulation resistance		> 1 000 MΩ	500 V DC, 60 s
Dielectric strength			
• between coil and contacts		1 000 V AC	type of insulation: basic
• contact clearance		400 V AC	type of clearance: micro-disconnection
Contact - coil distance			
• clearance		≥ 0,6 mm	
• creepage		≥ 0,6 mm	

### 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 61810-1
Shock resistance		10 g	
Vibration resistance		3,3 mm DA (constant amplitude)	10...55 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.

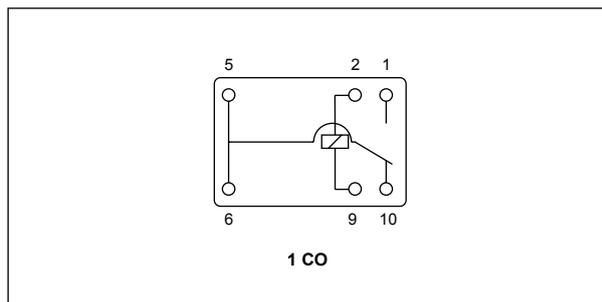
### Dimensions



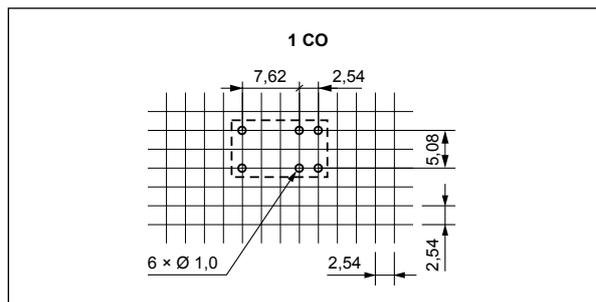
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## Connection diagram (pin side view)



## Pinout (solder side view)



## Mounting

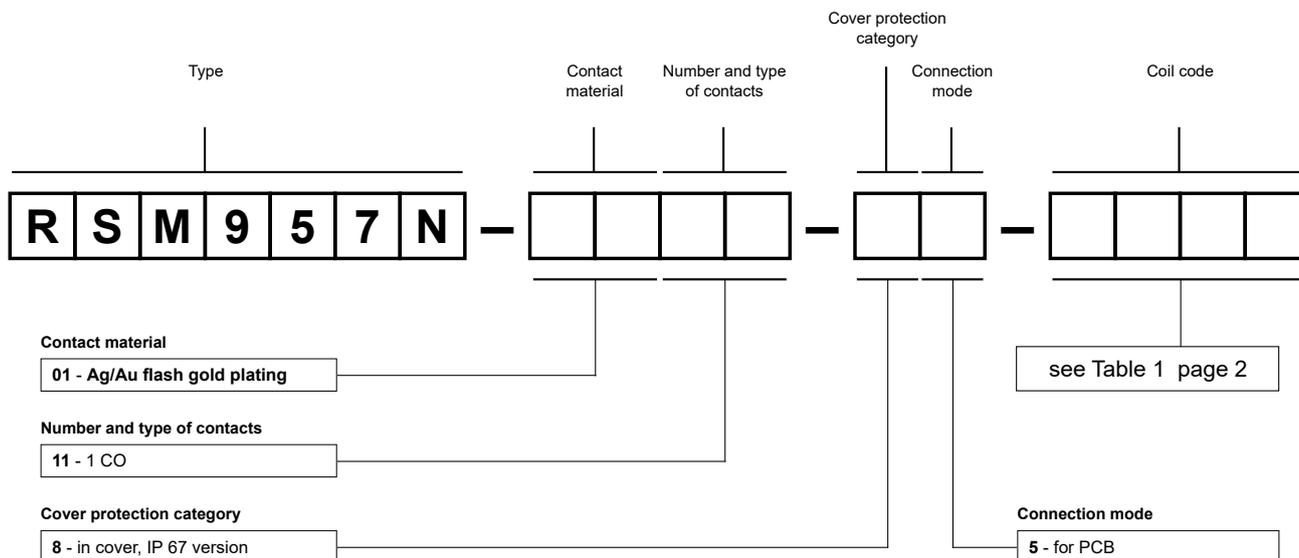
Relays **RSM957N** are designed for direct PCB mounting.

## 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.