



# RSR35

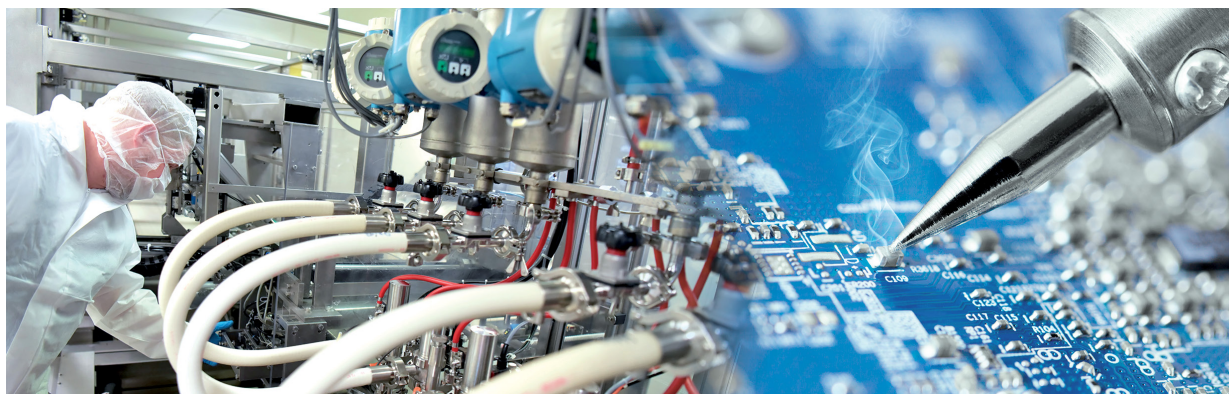
solid state relays, miniature



- DC switching • DC control input
- Transistor or MOSFET output • Load current 0,1...4 A
- Max. load voltage 28, 58 V DC
- Dielectric strength 2 500 Vrms (opto-isolation)
- Suitable for PCB mounted
- Recognitions, certifications, directives: RoHS, REACH,  

## Applications

Fast switching of small DC loads, temperature control.



## Basic technical data

Load voltage: 3...28 V DC, 3...58 V DC

Control input: DC

Load current: 0,1 A, 3 A, 4 A

Type		DC switching		
Load voltage	Control voltage	Load current		
		0,1 A	3 A	4 A
3...28 V DC	5 V DC			<b>RSR35-24D4-5M</b>
	12 V DC			<b>RSR35-24D4-12M</b>
	24 V DC			<b>RSR35-24D4-24M</b>
	48 V DC			<b>RSR35-24D4-48M</b>
	60 V DC			<b>RSR35-24D4-60M</b>
3...58 V DC	5 V DC	<b>RSR35-48D01-5M</b>	<b>RSR35-48D3-5M</b>	
	12 V DC	<b>RSR35-48D01-12M</b>	<b>RSR35-48D3-12M</b>	
	24 V DC	<b>RSR35-48D01-24M</b>	<b>RSR35-48D3-24M</b>	
	48 V DC	<b>RSR35-48D01-48M</b>	<b>RSR35-48D3-48M</b>	
	60 V DC	<b>RSR35-48D01-60M</b>	<b>RSR35-48D3-60M</b>	

## Load voltage

	RSR35-24...	RSR35-48...
Rated load voltage	24 V DC	48 V DC
Rated range of load voltage	3...28 V DC	3...58 V DC
Blocking voltage	33 V DC	58 V DC

## Control input

	DC switching	DC switching	DC switching
	RSR35-..D.-5.	RSR35-..D.-12.	RSR35-..D.-24.
Control voltage range	4...6 V DC	9,6...14,4 V DC	19,2...28,8 V DC
Must turn-on voltage	4 V DC	9,6 V DC	19,2 V DC
Must turn-off voltage	1 V DC	2,4 V DC	2,4 V DC
Maximum input current	25 mA 6 V DC	25 mA 14,4 V DC	25 mA 28,8 V DC
Response time pick-up	0,3 ms	0,3 ms	0,3 ms
Response time drop-out	0,3 ms	0,3 ms	0,3 ms

## Control input

	DC switching	DC switching
	RSR35-..D.-48.	RSR35-..D.-60.
Control voltage range	38,4...57,6 V DC	48...72 V DC
Must turn-on voltage	38,4 V DC	48 V DC
Must turn-off voltage	4,8 V DC	4,8 V DC
Maximum input current	20 mA 57,6 V DC	15 mA 72 V DC
Response time pick-up	0,3 ms	0,3 ms
Response time drop-out	0,3 ms	0,3 ms

## Output circuit

	RSR35-...01...	RSR35-...3...	RSR35-...4...
Rated load current	0,1 A	3 A	4 A
Rated load range	0,001...0,1 A	0,002...3 A	0,002...4 A
Maximum surge current	1 A 10 ms	30 A 10 ms	48 A 10 ms
Min. operational current	2 mA	2 mA	2 mA
Maximum off-state leakage current (at rated load voltage)	10 mA	10 mA	10 mA
Maximum on-state voltage drop (at rated current)	1,5 V DC	1,5 V DC	1,5 V DC
Maximum on-state resistance	–	37 mΩ	37 mΩ

## General data

	RSR35-...
Dielectric strength	input - output: 2 500 Vrms 50/60 Hz
Minimum insulation resistance	input - output: 1 000 MΩ 500 V DC
Ambient temperature (non-condensation and/or icing)	storage: -30...+100 °C operating: -30...+80 °C

❶ Data given for ambient temperature ≤ 25 °C. Above 25 °C the maximum current decreases - see "Thermal derating curves", page 3.

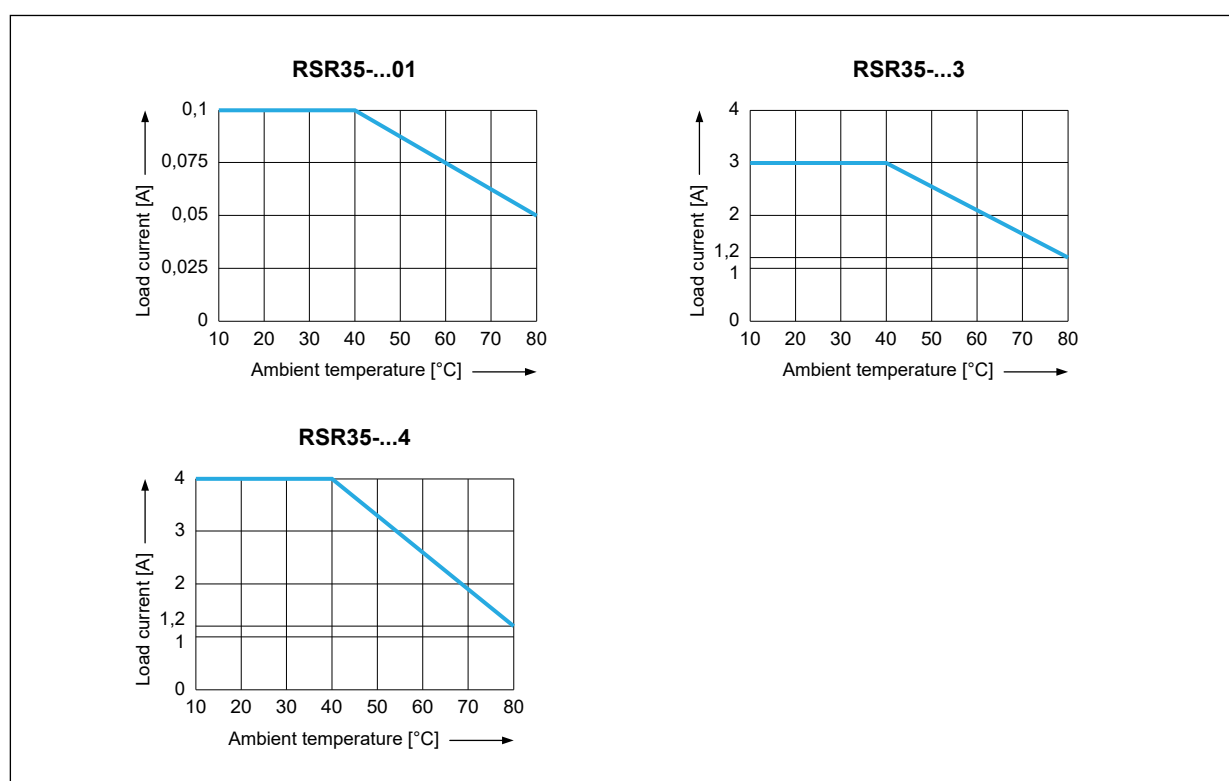
## Mechanical data

	RSR35-...
Dimensions (L x W x H)	28 x 5,2 x 15 mm
Weight (typical)	4 g
Protection category EN 60529	IP 00
Application	PCB
Solder bath temperature	max. 260 °C max. 10 s max. 350 °C max. 5 s

## Mounting

Relays **RSR35** are designed for direct PCB mounting.

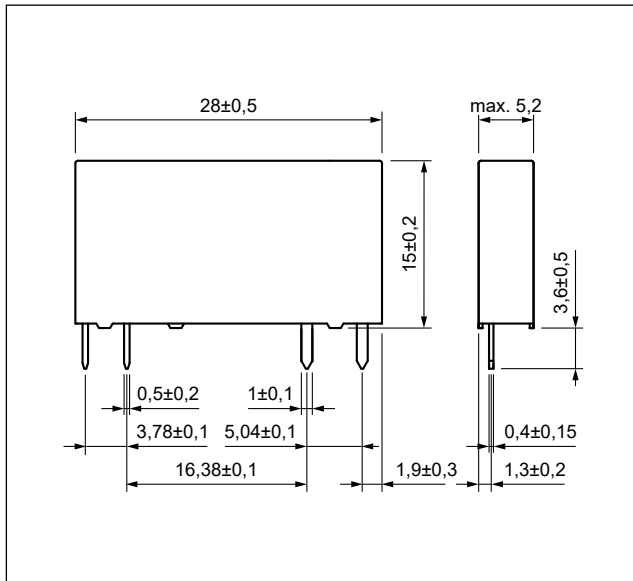
## Thermal derating curves



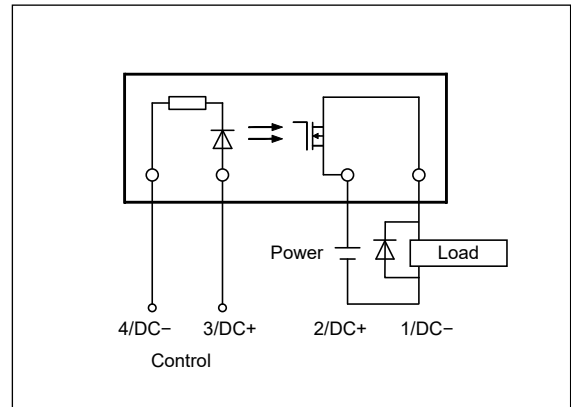
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solid state relays, miniature

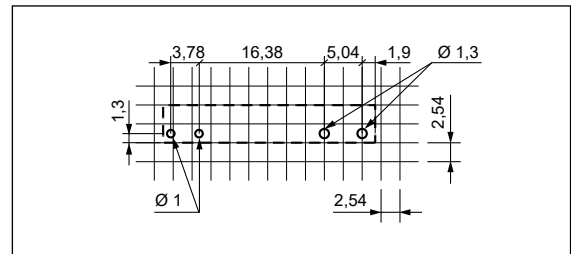
## Dimensions



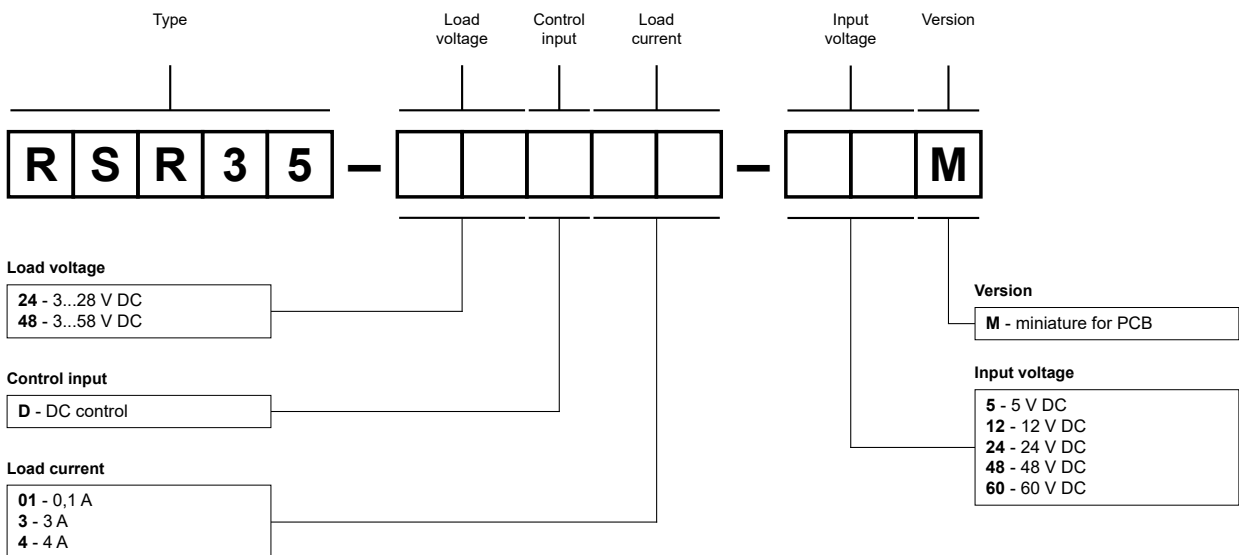
## Connection diagram



## Pinout (solder side view)



## Ordering codes



Examples of ordering codes ☺:

- RSR35-48D01-5M** relay **RSR35**, miniature for PCB, DC control, input voltage 5 V DC, load voltage 3...58 V DC, load current 0,1 A
- RSR35-48D3-24M** relay **RSR35**, miniature for PCB, DC control, input voltage 24 V DC, load voltage 3...58 V DC, load current 3 A
- RSR35-24D4-60M** relay **RSR35**, miniature for PCB, DC control, input voltage 60 V DC, load voltage 3...28 V DC, load current 4 A

☺ Ordering codes **RSR35** are specified in table "Type" on page 1.