

RSR30

Slimline Interface Relays



- Optically isolated
- Low on-state resistance
- Low input power consumption
- TTL and CMOS compatible
- RC networks (V AC)
- MOSFET output thyristor (V DC)

- Applications: household appliances, temperature control system, industrial automatic control, light system, office appliances, factory appliances
- Mounting: relays RSR30 are designed for direct PCB mounting, single in line package



AC Load - 2 A / 240 V

Input circuit

| Part Number | Nominal voltage V DC | Control voltage range V DC | Max. control current mA | Release voltage V DC | Input resistance kΩ |
|-------------------------|-------------------------|-------------------------------|----------------------------|-------------------------|------------------------|
| ▶ RSR30-D05-A1-24-020-1 | 5 | 3...10 | 12 | 1.0 | 0.32 |
| ▶ RSR30-D12-A1-24-020-1 | 12 | 7...20 | 10 | 1.0 | 1.07 |
| ▶ RSR30-D24-A1-24-020-1 | 24 | 18...32 | 7.7 | 1.0 | 3.0 |

Output circuit

AC Load - 2 A / 240V

| | |
|-------------------------------------|---|
| Nominal load current | 1 A AC see Figure below |
| Max. load current | 2 A AC see Figure below |
| Nominal load voltage | rest condition: 240 V AC |
| Load voltage range | 12...280 V AC |
| Non-repetitive peak voltage | rest condition: 600 V AC |
| Non-repetitive surge current | operating state: 80 A |
| Max. off-state leakage current | rest condition: 1.5 mA |
| Max. on-state voltage drop | operating state: 1.2 V |
| Min. load current | operating state: 50 mA |
| Off-state dV/dt | max. allowable rate of voltage rise: 500 V/μs |
| Operating frequency range | 47...400 Hz |
| RC snubber | 10 nF, 100 Ω |
| Operation resistance | - |
| Peak power dissipation | - |
| Operating switching frequency | - |
| Transient voltage suppressor | - |
| Max voltage of suppressor operation | - |

General data

| | |
|---------------------------------|---|
| Output circuit switching moment | R - instantaneous switching of the output circuit |
| Max. turn-on time | 100 μs at rated voltage |
| Max. turn-off time | 1/2 cycle + 1 ms at rated voltage |
| Insulation dielectric strength | between input and output: 4 000 V AC 1 minute |
| Dimensions (L x W x H) | 28 x 5 x 15 mm |
| Weight | 4 g |
| Storage temperature | -40...+100°C |
| Operating temperature | -20...+80 °C rated value: +55 °C see Figure below |
| Max. solder bath temperature | 220 °C 10 s |

DIMENSIONS



PIN OUTS



Load current in the function of the ambient temperature and distances between relays



▶ **BOLD** - Regular stocked items.

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DC Load - 2,5 A / 48 V

Input circuit

| Part Number | Nominal voltage V DC | Control voltage range V DC | Max. control current mA | Release voltage V DC | Input resistance kΩ |
|-------------------------|-------------------------|-------------------------------|----------------------------|-------------------------|------------------------|
| ▶ RSR30-D05-D1-04-025-1 | 5 | 3...10 | 12 | 1.8 | 0.32 |
| ▶ RSR30-D12-D1-04-025-1 | 12 | 7...20 | 10 | 3.6 | 1.07 |
| ▶ RSR30-D24-D1-04-025-1 | 24 | 18...32 | 7.7 | 8.3 | 3.0 |
| ▶ RSR30-D48-D1-04-025-1 | 48 | 38...58 | 4.4 | 8.3 | 10.8 |

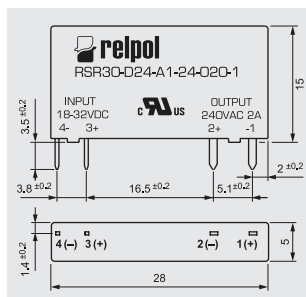
Output circuit

| | |
|-------------------------------------|--|
| Nominal load current | 1 A DC see Figure below |
| Max. load current | 2.5 A DC see Figure below |
| Nominal load voltage | rest condition: 48 V DC |
| Load voltage range | 0...60 V DC |
| Non-repetitive peak voltage | rest condition: 100 V DC |
| Non-repetitive surge current | operating state: 6 A |
| Max. off-state leakage current | rest condition: 1 mA |
| Max. on-state voltage drop | operating state: 0.4 V |
| Min. load current | operating state: 1 mA |
| Off-state dV/dt | - |
| Operating frequency range | - |
| RC snubber | - |
| Operation resistance | operating state: 160 mΩ at rated current |
| Peak power dissipation | 600 W |
| Operating switching frequency | 10 Hz |
| Transient voltage suppressor | Yes |
| Max voltage of suppressor operation | 60 V DC |

General data

| | |
|---------------------------------|---|
| Output circuit switching moment | R - instantaneous switching of the output circuit |
| Max. turn-on time | 50 μs at rated voltage |
| Max. turn-off time | 600 μs at rated voltage |
| Insulation dielectric strength | between input and output: 3 750 V AC 1 minute |
| Dimensions (L x W x H) | 28 x 5 x 15 mm |
| Weight | 4 g |
| Storage temperature | -25...+100°C |
| Operating temperature | -20...+80 °C rated value: +55 °C see Figure below |
| Max. solder bath temperature | 220 °C 10 s |

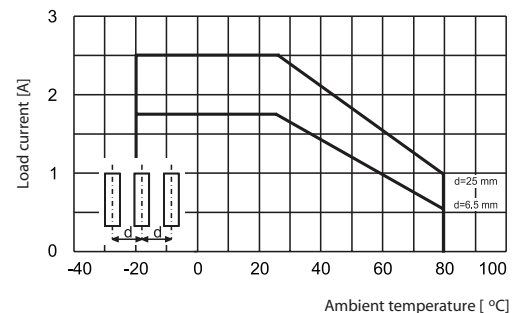
DIMENSIONS



PIN OUTS



Load current in the function of the ambient temperature and distances between relays



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PIR6W-1PS

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DC Load - 4 A / 24V Version

Input circuit

| Part Number | Nominal voltage V DC | Control voltage range V DC | Max. control current mA | Release voltage V DC | Input resistance kΩ |
|-------------------------|-------------------------|-------------------------------|----------------------------|-------------------------|------------------------|
| ▶ RSR30-D05-D1-02-040-1 | 5 | 3...10 | 12 | 1.8 | 0.32 |
| ▶ RSR30-D12-D1-02-040-1 | 12 | 7...20 | 10 | 3.6 | 1.07 |
| ▶ RSR30-D24-D1-02-040-1 | 24 | 18...32 | 7.7 | 8.3 | 3.0 |
| ▶ RSR30-D48-D1-02-040-1 | 48 | 38...58 | 4.4 | 8.3 | 10.8 |

Output circuit

DC Load - 4 A / 24V

| | |
|-------------------------------------|-------------------------|
| Nominal load current | 2 A DC see Figure below |
| Max. load current | 4 A DC see Figure below |
| Nominal load voltage | rest condition: 24 V DC |
| Load voltage range | 0...32 V DC |
| Non-repetitive peak voltage | rest condition: 60 V DC |
| Non-repetitive surge current | operating state: 6 A |
| Max. off-state leakage current | rest condition: 1 mA |
| Max. on-state voltage drop | operating state: 0.24 V |
| Min. load current | operating state: 1 mA |
| Off-state dV/dt | - |
| Operating frequency range | - |
| RC snubber | - |
| Operation resistance | operating state: 120 mΩ |
| Peak power dissipation | 600 W |
| Operating switching frequency | 10 Hz |
| Transient voltage suppressor | Yes |
| Max voltage of suppressor operation | 36 V DC |

General data

| | |
|---------------------------------|---|
| Output circuit switching moment | R - instantaneous switching of the output circuit |
| Max. turn-on time | 50 μs at rated voltage |
| Max. turn-off time | 600 μs at rated voltage |
| Insulation dielectric strength | between input and output: 3 750 V AC 1 minute |
| Dimensions (L x W x H) | 28 x 5 x 15 mm |
| Weight | 4 g |
| Storage temperature | -25...+100 °C |
| Operating temperature | -20...+80 °C rated value: +55 °C see Figure below |
| Max. solder bath temperature | 220 °C 10 s |

DIMENSIONS



PIN OUTS



Load current in the function of the ambient temperature and distances between relays



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DC Load - 1 A / 100V Version

Input circuit

| Part Number | Nominal voltage V DC | Control voltage range V DC | Max. control current mA | Release voltage V DC | Input resistance kΩ |
|-------------------------|-------------------------|-------------------------------|----------------------------|-------------------------|------------------------|
| ▶ RSR30-D05-D1-24-010-1 | 5 | 3...10 | 12 | 1.8 | 0.32 |
| ▶ RSR30-D12-D1-24-010-1 | 12 | 7...20 | 10 | 3.6 | 1.07 |
| ▶ RSR30-D24-D1-24-010-1 | 24 | 18...32 | 7.7 | 8.3 | 3.0 |
| ▶ RSR30-D48-D1-24-010-1 | 48 | 38...58 | 4.4 | 8.3 | 10.8 |

Output circuit

DC Load - 1 A / 100V

| | |
|-------------------------------------|--------------------------------------|
| Nominal load current | 0.4 A DC see Figure below |
| Max. load current | 1 A DC see Figure below |
| Nominal load voltage | rest condition: 100 V DC |
| Load voltage range | 0...180 V DC |
| Non-repetitive peak voltage | rest condition: 180 V DC |
| Non-repetitive surge current | operating state: 6 A |
| Max. off-state leakage current | rest condition: 1 mA |
| Max. on-state voltage drop | operating state: 0.6 V |
| Min. load current | operating state: 1 mA |
| Off-state dV/dt | - |
| Operating frequency range | - |
| RC snubber | - |
| Operation resistance | operating state: 1.5 Ω maximum value |
| Peak power dissipation | 600 W |
| Operating switching frequency | 10 Hz |
| Transient voltage suppressor | Yes |
| Max voltage of suppressor operation | 180 V DC |

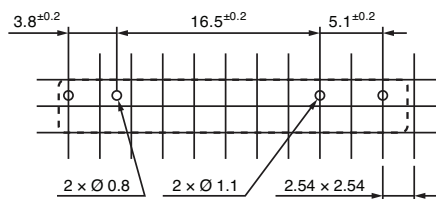
General data

| | |
|---------------------------------|---|
| Output circuit switching moment | R - instantaneous switching of the output circuit |
| Max. turn-on time | 50 μs at rated voltage |
| Max. turn-off time | 600 μs at rated voltage |
| Insulation dielectric strength | between input and output: 2 500 V AC 1 minute |
| Dimensions (L x W x H) | 28 x 5 x 15 mm |
| Weight | 4 g |
| Storage temperature | -25...+100 °C |
| Operating temperature | -20...+80 °C rated value: +55 °C see Figure below |
| Max. solder bath temperature | 220 °C 10 s |

DIMENSIONS



PIN OUTS



Load current in the function of the ambient temperature and distances between relays



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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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