

# 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<br>V DC | Control voltage range<br>V DC | Max. control current<br>mA | Release voltage<br>V DC | Input resistance<br>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                    |

### AC Load - 2 A / 240V

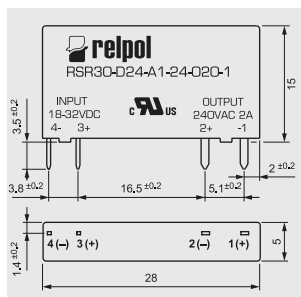
#### Output circuit

|                                     |                                               |
|-------------------------------------|-----------------------------------------------|
| 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 | -                                             |

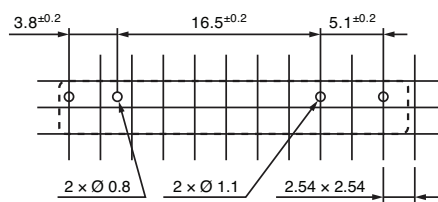
#### General data

|                                 |                                                   |
|---------------------------------|---------------------------------------------------|
| 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

