



»» Features

- Low cost automotive relay with ISO 280 footprint.
- High rating up to 35A at 125 degree C.
- Optional to be equipped with diode or resistor.
- General purpose applications for automotive in power control box.

»» Type List

| Terminal style | Contact form | Designation (provided with) | Enclosure style | | |
|-----------------|--------------|-----------------------------|-----------------|-------------|----------------------|
| | | | Dust cover | Flux tight | Sealed type washable |
| Socket terminal | 1A (SPNO) | ----- | 301-1A-D | 301-1A-C | 301-1A-S |
| | | Resistor ⁽¹⁾ | 301-1A-D-R1 | 301-1A-C-R1 | 301-1A-S-R1 |
| | | Diode | 301-1A-D-D1 | 301-1A-C-D1 | 301-1A-S-D1 |
| | 1C (SPDT) | ----- | 301-1C-D | 301-1C-C | 301-1C-S |
| | | Resistor ⁽¹⁾ | 301-1C-D-R1 | 301-1C-C-R1 | 301-1C-S-R1 |
| | | Diode | 301-1C-D-D1 | 301-1C-C-D1 | 301-1C-S-D1 |

Note : (1) 6VDC COIL: 180 Ω Resistor in parallel
 12VDC COIL: 680 Ω Resistor in parallel
 24VDC COIL: 2700 Ω Resistor in parallel

»» Ordering Information

301 - 1A - D - R1
 1 2 3 4

1. 301 -- Basic series designation
2. 1A -- Single pole normally open
 1C -- Single pole double throw
3. D -- Dust cover
 C -- Flux tight
 S -- Sealed type washable
4. Blank-- Standard type
 R1 -- Coil parallel with resistor 6VDC-180 Ω、12VDC-680Ω、24VDC-2700Ω
 D1 -- Coil parallel with diode

»» Contact Rating

| Resistive load | 1A | 1C |
|----------------|-----------|----------------------------------|
| | 35A 14VDC | NO : 35A 14VDC NC : 20A 14VDC |

»» Coil Rating (DC)

| Rated voltage (V) | Rated current ±10 % at 23 °C (mA) | Coil resistance ±10 % at 23 °C (Ω) | Max. continuous voltage at 85 °C | Pick up voltage(Max) at 23 °C | Drop out voltage(Min) at 23 °C | Power consumption at rated voltage |
|-------------------|-----------------------------------|------------------------------------|----------------------------------|-------------------------------|--------------------------------|------------------------------------|
| 6 | 187.5 | 32 | 133 % of rated voltage | 60 % of rated voltage | 10 % of rated voltage | approx. 1.2W |
| 12 | 97.5 | 123 | | | | |
| 24 | 49.6 | 483 | | | | |

»» Specification

| | | |
|--------------------------------------|--------------------------|---|
| Contact material | AgSnO alloy | |
| Contact voltage drop ⁽¹⁾ | Typ. 40mV at 10A | |
| Operate time ⁽¹⁾ | 10ms Max. | |
| Release time ⁽¹⁾ | 10ms Max. | |
| Insulation resistance ⁽¹⁾ | 20MΩ Min. (DC 500V) | |
| Dielectric strength ⁽¹⁾ | Between open contact | : AC 500V , 50/60Hz 1 min. |
| | Between contact and coil | : AC 500V , 50/60Hz 1 min. |
| Vibration resistance | Operating extremes | 10~500Hz , 5.0G |
| | Damage limits | 10~500Hz , 5.0G |
| Shock resistance | Operating extremes | 10G |
| | Damage limits | 100G |
| Life expectancy | Mechanical | 10,000,000 operations (frequency 18,000 operations/hr) |
| | Electrical | 100,000 operations (frequency 1,800 operations/hr) |
| Temperature range | Storage | -40~+155 °C (no freezing) |
| | Operating | -40~+125 °C (no freezing) |
| Weight | Approx. 20 g | |

Note:(1)Initial value

»» Outline Dimensions

