



»» 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-680 Ω 、24VDC-2700 Ω
D1 -- Coil parallel with diode

»» Contact Rating

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

»» Coil Rating (DC)

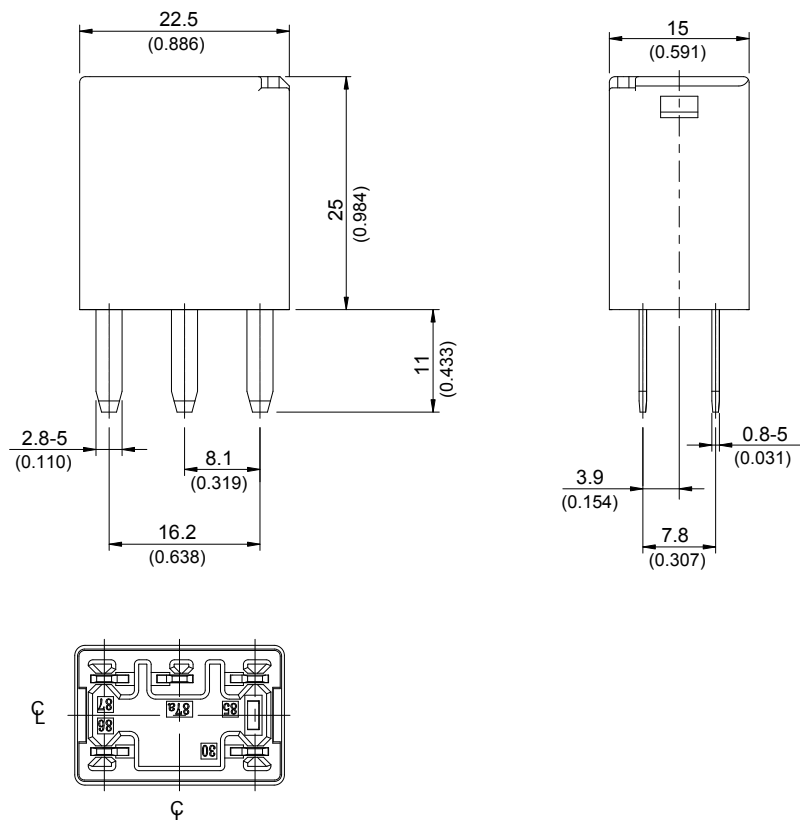
| Rated voltage (V) | Rated current $\pm 10\%$ at 23 °C (mA) | Coil resistance $\pm 10\%$ at 23 °C (Ω) | Max. continuous voltage at 85 °C | Pick up voltage(Max) at 23 °C | Drop out voltage(Min) at 23 °C | Power consumption at rated voltage |
|-------------------|--|--|----------------------------------|-------------------------------|----------------------------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

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

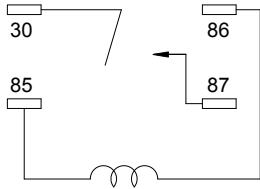
Outline Dimensions



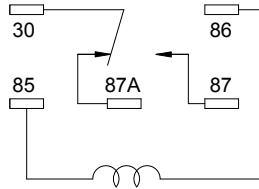
Wiring Diagram

BOTTOM VIEW

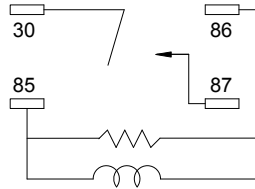
1A



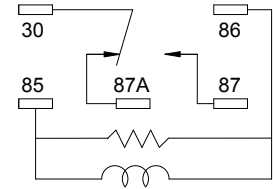
1C



1A (R1)

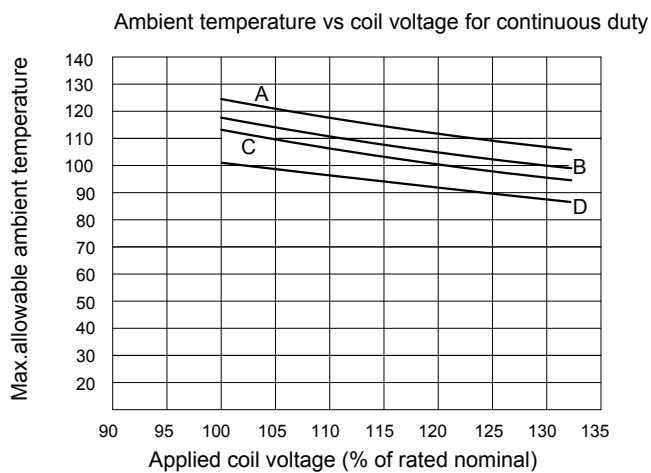
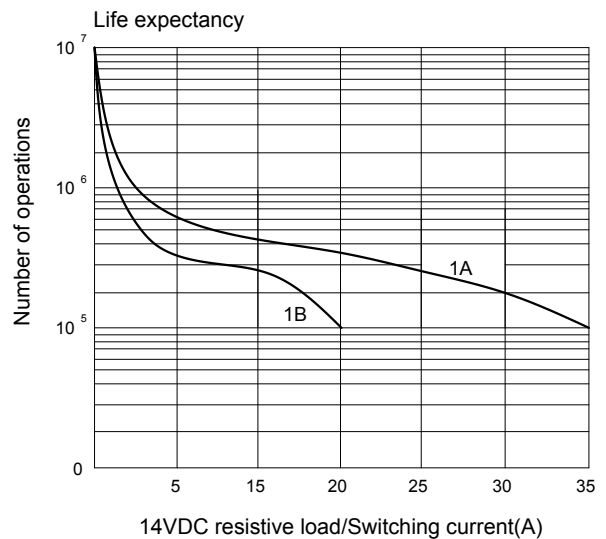
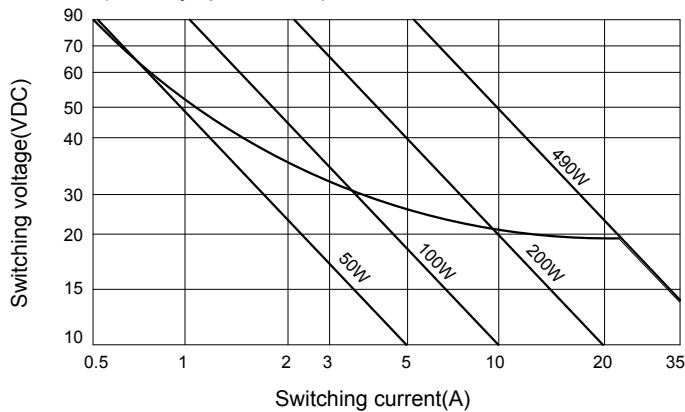


1C (R1)

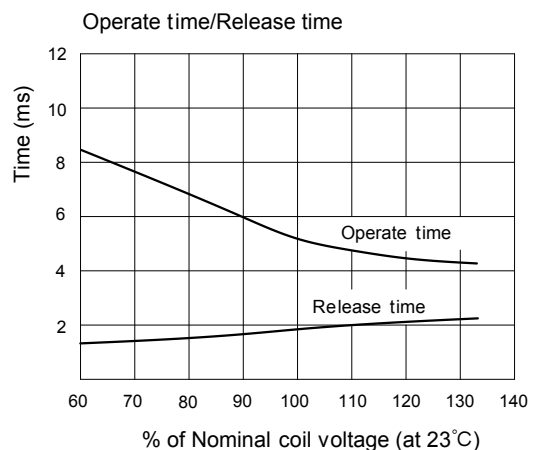


Engineering Data

Safe breaking, arc extinguished
(normally open contact) for resistive loads.



A: 15A B: 20 C: 25 D: 35A Contact load (resistive)
Maximum mean coil temperature = 155°C



Mouser Electronics

Authorized Distributor

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Song Chuan:

[301-1C-C-12VDC](#) [301-1C-C-R1-U01-12VDC](#) [301-1A-S-R1-12VDC](#) [301-1C-C-D1-24VDC](#) [301-1C-C-R1-24VDC](#) [301-1C-C-D1-12VDC](#) [301-1C-C-D1 U05 24 Vdc](#) [301-1C-S-R1-12VDC](#) [301-1C-S-D1-24VDC](#) [301-1A-C-R1-U03-12VDC](#)
[301-1C-D-R1-12VDC](#) [301-1C-C-R1-U02-24VDC](#) [301-1C-C-D1-U05-12VDC](#) [301-1C-S-D1-12VDC](#) [301-1C-S-12VDC](#)
[301-1A-S-D1-12VDC](#) [301-1C-S-D2-12VDC](#) [301-1A-S-12VDC](#)