



»» Features

- Ultra Micro ISO Automotive relay.
- High Rating up to 20A.
- High Temperature withstand up to 125°C ambient.
- General Purpose for Automotive applications.
- Comply with RoHS-Directive 2002/95/EC, and ELV-Directive 2000/53/EC.

»» Type List

| Terminal style | Contact form | Designation (provided with) | Enclosure style | |
|-----------------|--------------|-----------------------------|-----------------|----------------------|
| | | | Flux tight | Sealed type washable |
| Socket terminal | 1A (SPNO) | ----- | 303-1AH-C | 303-1AH-S |
| | | Resistor | 303-1AH-C-R1 | 303-1AH-S-R1 |
| | | Diode | 303-1AH-C-D1 | 303-1AH-S-D1 |

»» Ordering Information

303 - 1A H - C - R1
 1 2 3 4 5

- | | |
|------------------------------------|--|
| 1. 303 -- Basic series designation | 5. Blank -- Standard type |
| 2. 1A -- Single pole normally open | R1 -- Coil parallel with 1/2W resistor for 12V 1.1KΩ, 24V 4.3KΩ |
| 3. H -- Contact material AgSnO | D1 -- Coil parallel with diode IN4007 the positive pole on # 85 terminal |
| 4. C -- Flux tight | |
| S -- Sealed type washable | |

»» Contact Rating

| | |
|-----------|--|
| Resistive | 20A 14VDC, 10A 28VDC, 100K ops. |
| Motor | 16A 14VDC Inrush 80A ; ON 2s / OFF 5s, -30~+80°C, 300K ops. |
| Lamp | 16A 14VDC Inrush 80A ; ON 3s / OFF 3s, -30~+100°C, 100K ops. |

»» Coil Rating (DC)

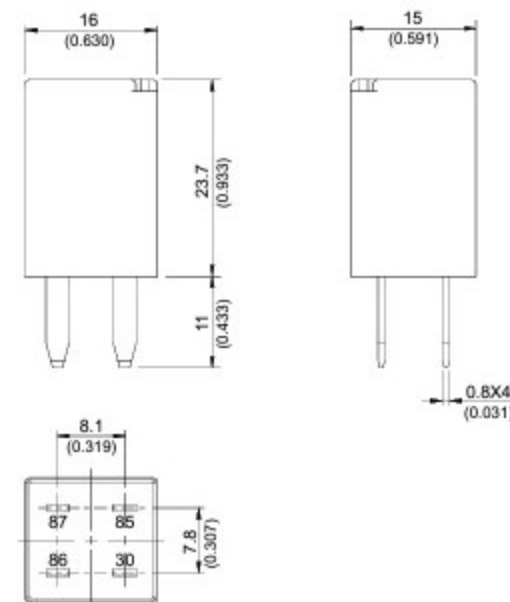
| Rated Voltage (V) | Rated current ±10 % at 23° C (mA) | Coil resistance ±10 % at 23° C (Ω) | Max continuous voltage at 85° C | Pick up voltage(Max) at 23° C | Drop out voltage(Min) at 23° C | Power consumption at rated voltage |
|-------------------|-----------------------------------|------------------------------------|---------------------------------|-------------------------------|--------------------------------|------------------------------------|
| 12 | 80 | 150 | 133 % of rated voltage | 60 % of rated voltage | 8 % of rated voltage | approx. 0.96W |
| 24 | 40 | 600 | | | | |

»» Specification

| | | |
|--------------------------------------|-----------------------------|--|
| Contact material | AgSnO alloy | |
| Contact voltage drop ⁽¹⁾ | Typ. 50mV at 10A | |
| Operate time ⁽¹⁾ | 10 ms Max. | |
| Release time ⁽¹⁾ | 10 ms Max. | |
| Insulation resistance ⁽¹⁾ | 20 MΩ 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) |
| Operating ambient temperature | -40 ~ +125° C (no freezing) | |
| Weight | Approx. 20 g | |

Note : (1) initial value

»» Outline Dimensions



»» Wiring Diagram

BOTTOM VIEW

