



»» Features

- Ultra Micro 280 automotive relay.
- SPNO contact configuration.
- Switch up to 20A resistive load, 100,000 ops., 23°C.
- Operating ambient temperature -40°C to 125°C.
- Optional resistor or diode for coil transient suppression.
- Complies with RoHS-Directive 2011/65/EU 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 -
 1 2 3 4 5 6

- | | |
|---|---|
| 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 1N4007 the diode anode on # 85 terminal |
| 4. C -- Flux tight
S -- Sealed type washable | 6. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability) |

»» Contact Rating

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

»» Coil Rating (DC)

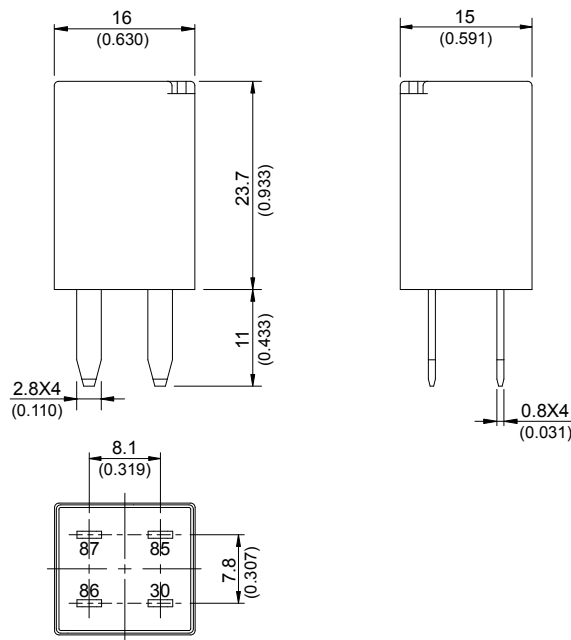
Rated Voltage (V)	Rated current ±10 % at 23° C (mA)	Coil resistance ±10 % at 23° C (Ω)	Max continuous voltage at 85° C	Pick up voltage(Max.) at 23° C	Drop out voltage(Min.) at 23° C	Power consumption at rated voltage
12	80	150	133 % of rated voltage	60 % of rated voltage	8 % of rated voltage	approx.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

»» 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	

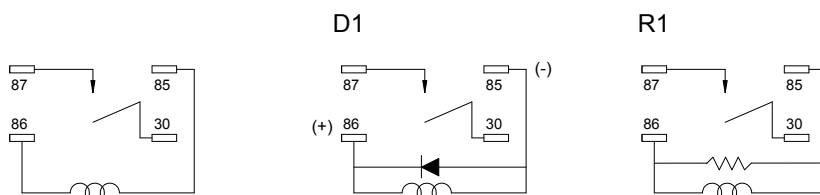
Note : (1) Initial value. Operate and release time excluding contact bounce.

»» Outline Dimensions



»» Wiring Diagram

BOTTOM VIEW



»» Engineering Data

