



301



»» Features

- ISO 280 footprint automotive relay.
- High rating up to 35A at 125°C
- Optional to be equipped with diode or resistor.
- General purpose applications for automotive in power control box.
- Comply with RoHS-Directive 2011/65/EU, and ELV-Directive 2000/53/EC.

»» 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	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	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

»» Ordering Information

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

- | | |
|------------------------------------|--|
| 1. 301 -- Basic series designation | C -- Flux tight |
| 2. 1A -- Single pole normally open | S -- Sealed type washable |
| 1C -- Single pole double throw | |
| 3. D -- Dust cover | |
| | 4. Blank-- Standard type |
| | R1 -- Coil parallel with 1/2W resistor for 6V 180Ω, 12V 680Ω, 24V 2700Ω |
| | D1 -- Coil parallel with diode IN4007 the positive pole on # 85 terminal |

»» Contact Rating

Resistive load	1A	1C
		35A 14VDC 15A 28VDC

»» 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

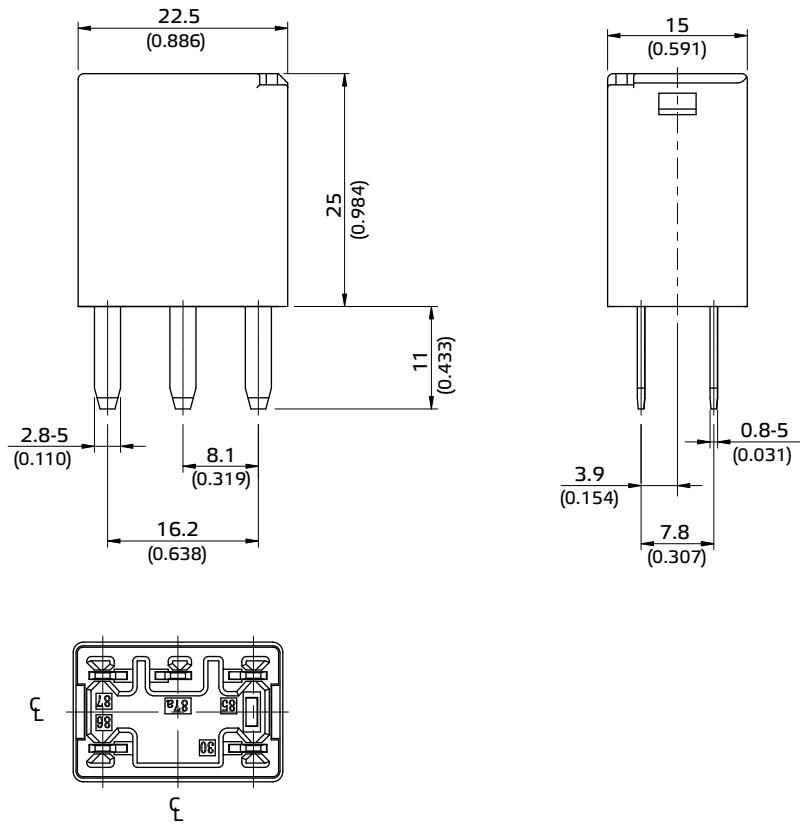
Contact material	AgSnO alloy	
Contact voltage drop ⁽¹⁾	Typ. 40mV at 10A	
Operate time ⁽¹⁾	10ms Max.	
Release time ⁽¹⁾	10ms Max.	
Insulation resistance ⁽¹⁾	20MΩ Min. (DC 500V)	
Dielectric strength ⁽¹⁾	Between open contact	: AC 500V , 50/60Hz 1 min.
	Between contact and coil	: AC 500V , 50/60Hz 1 min.
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. Operate and release time excluding contact bounce.



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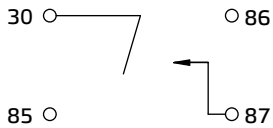
»» Outline Dimensions



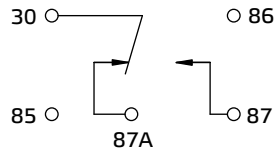
»» Wiring Diagram

BOTTOM VIEW

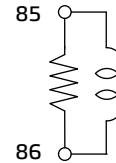
1A



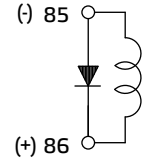
1C



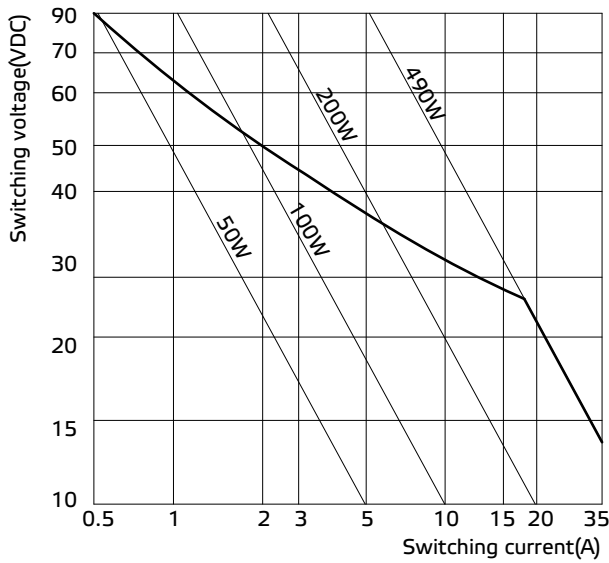
R1



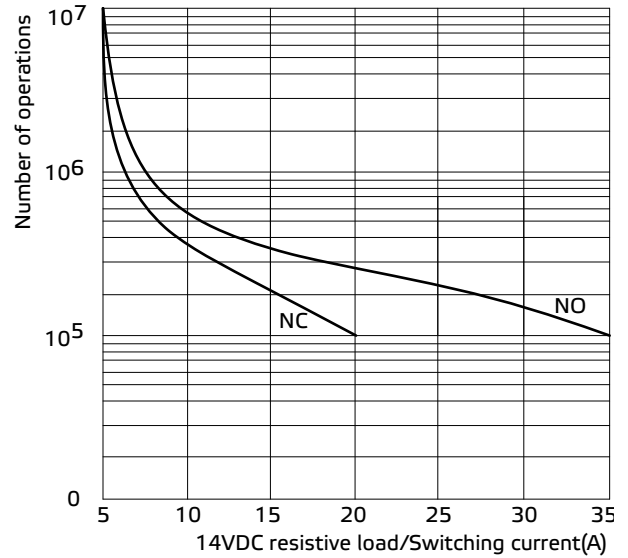
D1



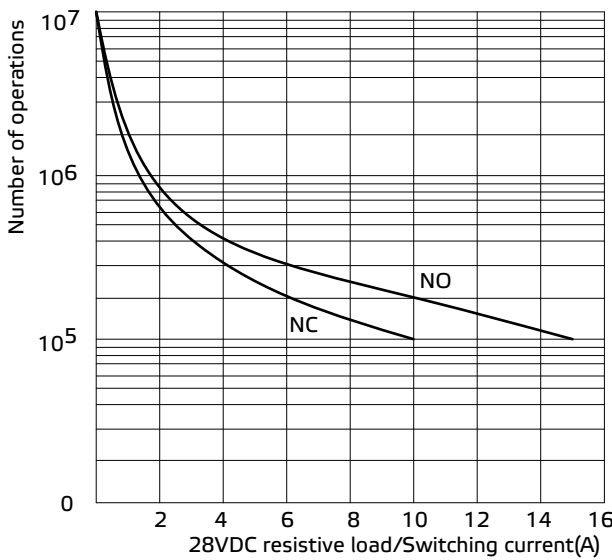
»» Engineering Data



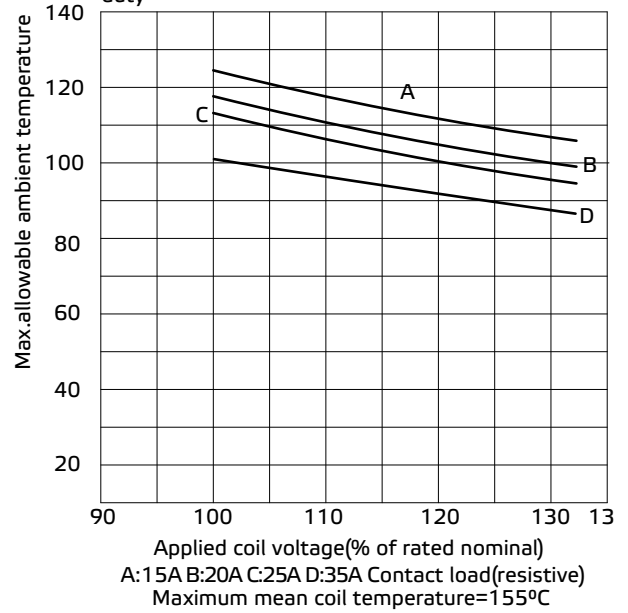
Life expectancy



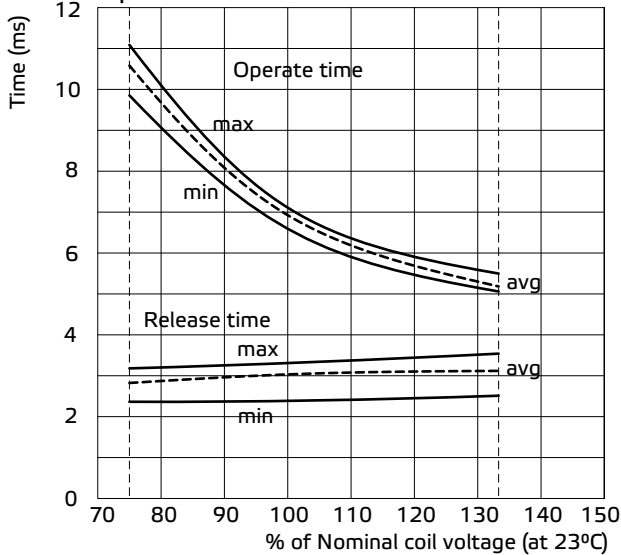
Life expectancy



Ambient temperature vs coil voltage for continuous duty



Operate time/Release time



Disclaimer

All technical performance data apply to the relay as such, specific conditions of the individual application are not considered. Please always check the suitability of the relay for your intended purpose. We do not assume any responsibility or liability for not complying herewith. We recommend to complete our questionnaire and to request our technical service. Any responsibility for the application of the product remains with the customer only. All specifications are subject to change without notification. All rights of Song Chuan are reserved.