

871



»» Features

- ☐ Micro ISO automotive relay.
- ☐ SPNO & SPDT contact configurations.
- ☐ NO contacts switch 35A resistive load, NC contacts switch 20A resistive load, 100,000 ops., 23°C.
- ☐ Operating ambient temperature -40°C to 125°C.
- ☐ Available with plain cover and skirted cover.
- ☐ 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			
			Dust cover	Dust cover /Fixed Base	Flux tight	Sealed type washable
Socket terminal	1A (SPNO)	-----	871-1A-D	871-1A-DF	871-1A-C	871-1A-S
		Resistor	871-1A-D-R1	871-1A-DF-R1	871-1A-C-R1	871-1A-S-R1
		Diode	871-1A-D-D1	871-1A-DF-D1	871-1A-C-D1	871-1A-S-D1
	1C (SPDT)	-----	871-1C-D	871-1C-DF	871-1C-C	871-1C-S
		Resistor	871-1C-D-R1	871-1C-DF-R1	871-1C-C-R1	871-1C-S-R1
		Diode	871-1C-D-D1	871-1C-DF-D1	871-1C-C-D1	871-1C-S-D1

»» Ordering Information

871 - 1A - C - ☐ ☐
 1 2 3 4 5

1. 871 -- Basic series designation
2. 1A -- Single pole normally open
1C -- Single pole double throw
3. D -- Dust cover
DF -- Dust cover / base holder type available
C -- Flux tight
S -- Sealed type washable
4. Blank -- Standard type
R1 -- Coil parallel with 1/2W resistor for 6V 180Ω, 12V 680Ω, 24V 2700Ω
D1 -- Coil parallel with diode 1N4007 the diode anode on # 85 terminal
5. ☐ -- Coil voltage (please refer to the coil rating data for the availability)

»» Contact Rating

Resistive load	1A	1C
	35A 14VDC 15A 28VDC	NO: 35A 14VDC , 15A 28VDC NC: 20A 14VDC , 10A 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		rated voltage	rated voltage	
24	49.6	483		rated voltage	rated voltage	

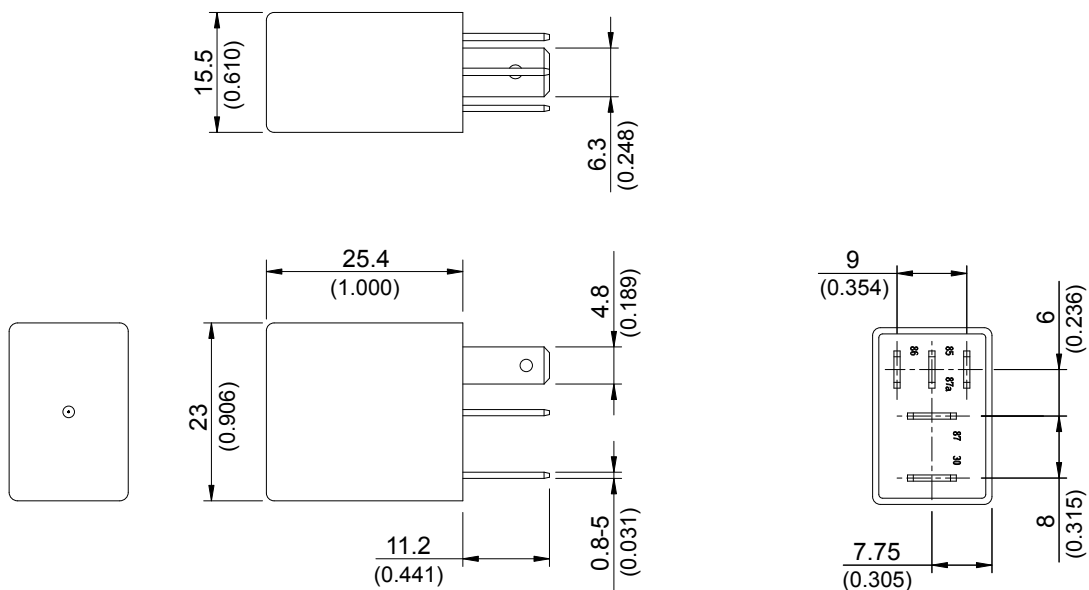
Specification

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)
Operating ambient temperature	-40~+125°C (no freezing)	
Weight	Approx. 20 g	

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

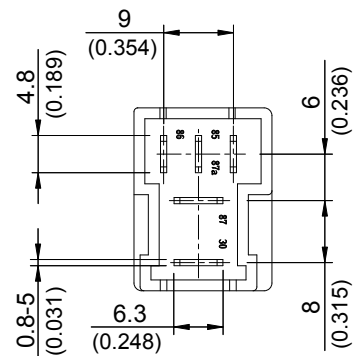
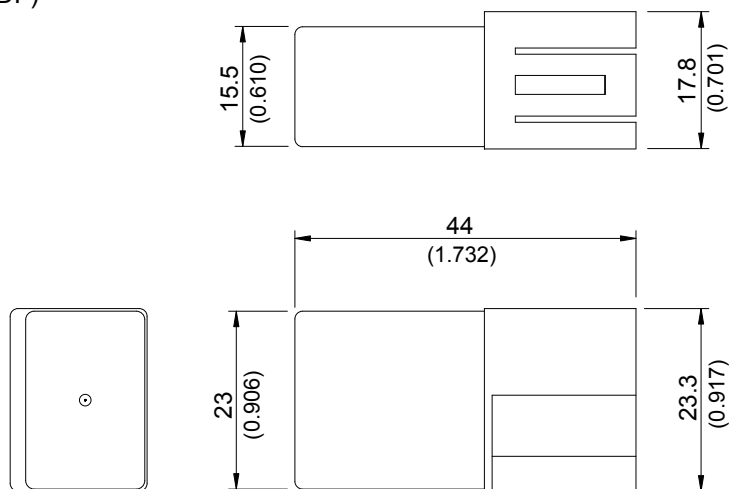
Outline Dimensions

◆871 (C,D)

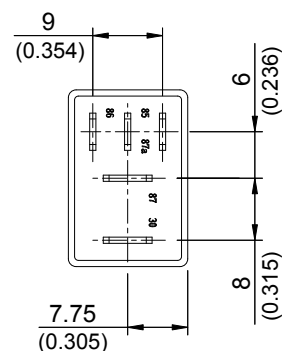
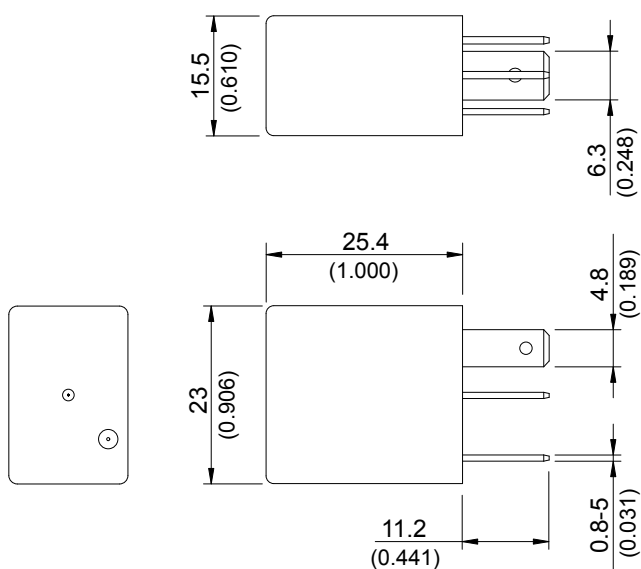


871

◆ 871 (DF)



◆ 871 (S,V)



TOLERANCE:
 LESS THAN: 1(0.039) $\pm 0.1(0.004)$
 5(0.197) $\pm 0.3(0.012)$
 20(0.787) $\pm 0.5(0.020)$
 MORE THAN: 20(0.787) $\pm 1(0.039)$

Wiring Diagram

BOTTOM VIEW

1C

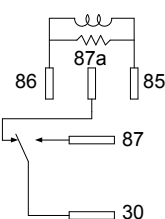
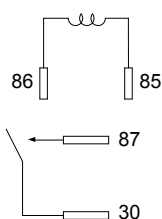
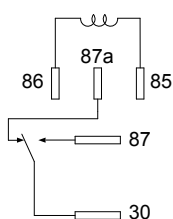
1A

1C

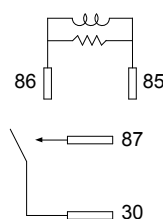
1A

1C

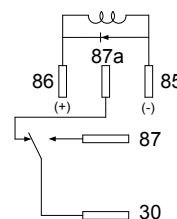
1A



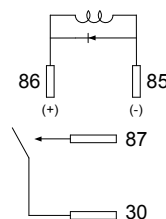
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»» Engineering Data

