871

Features

- ☐Low cost & high rating automotive relays up to 35A/14VDC.
- ☐SPNO & SPDT of contact configuration.
- ☐Skirted cover and plain cover are both available.
- ☐Optional to be equipped with diode or resistor.

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 (1)	871-1A-D-R1	871-1A-DF-R1	871-1A-C-R1	871-1A-S-R1
	1C (SPDT)	----------	871-1C-D	871-1C-DF	871-1C-C	871-1C-S
		Resistor (1)	871-1C-D-R1	871-1C-DF-R1	871-1C-C-R1	871-1C-S-R1

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

871 - 1A - C - R1

1 2 3 4

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 resistor 180Ω for coil voltage 6VDC，680Ω for coil voltage 12VDC,2700Ω for coil voltage 24VDC

Contact Rating

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

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				

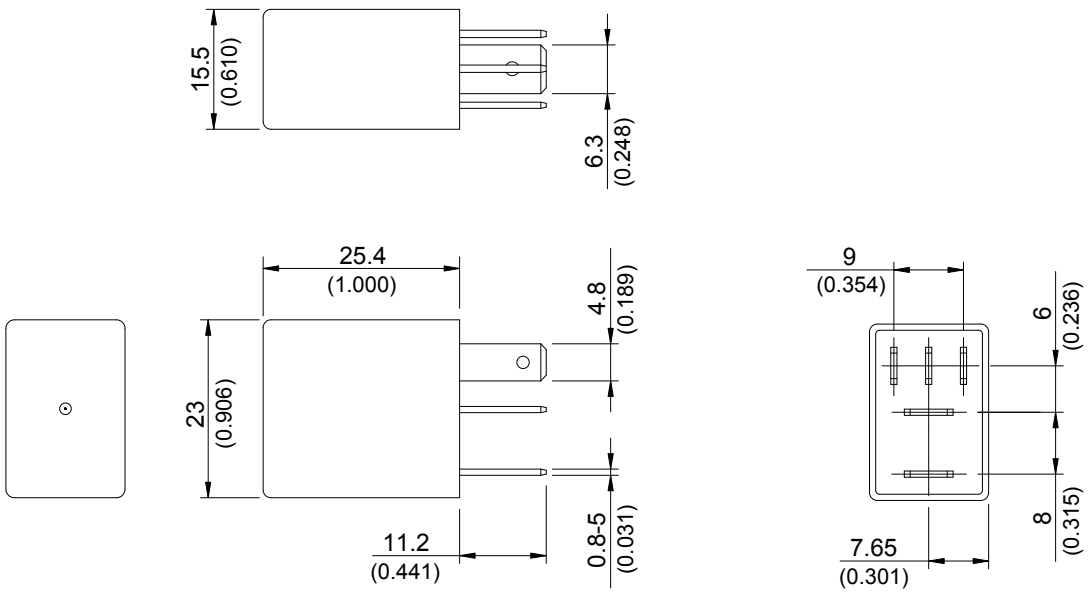
Specification

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

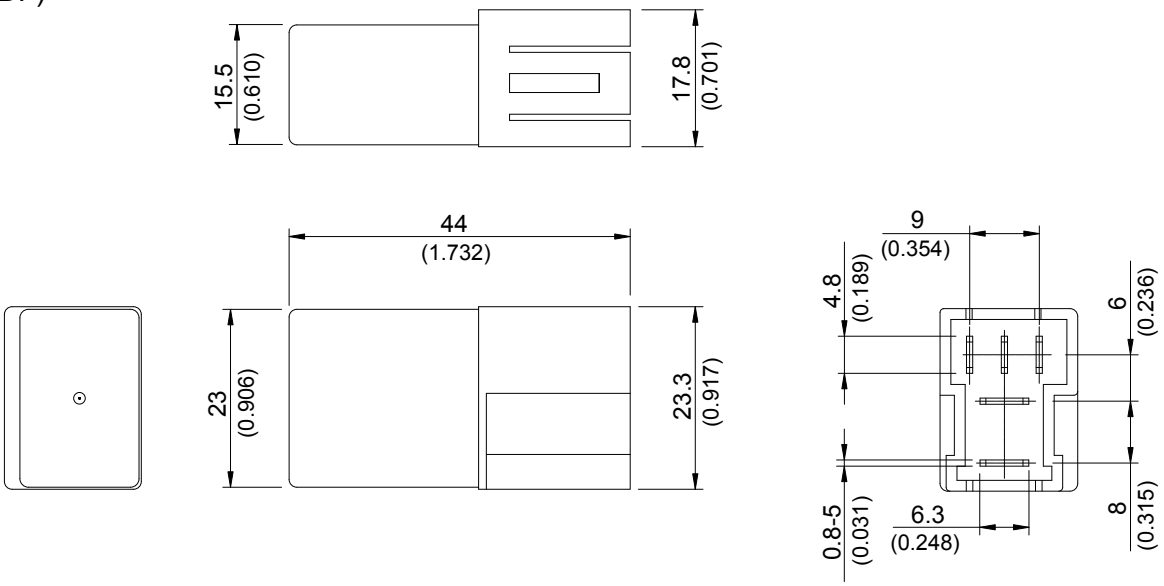
Note:(1)Initial value

Outline Dimensions

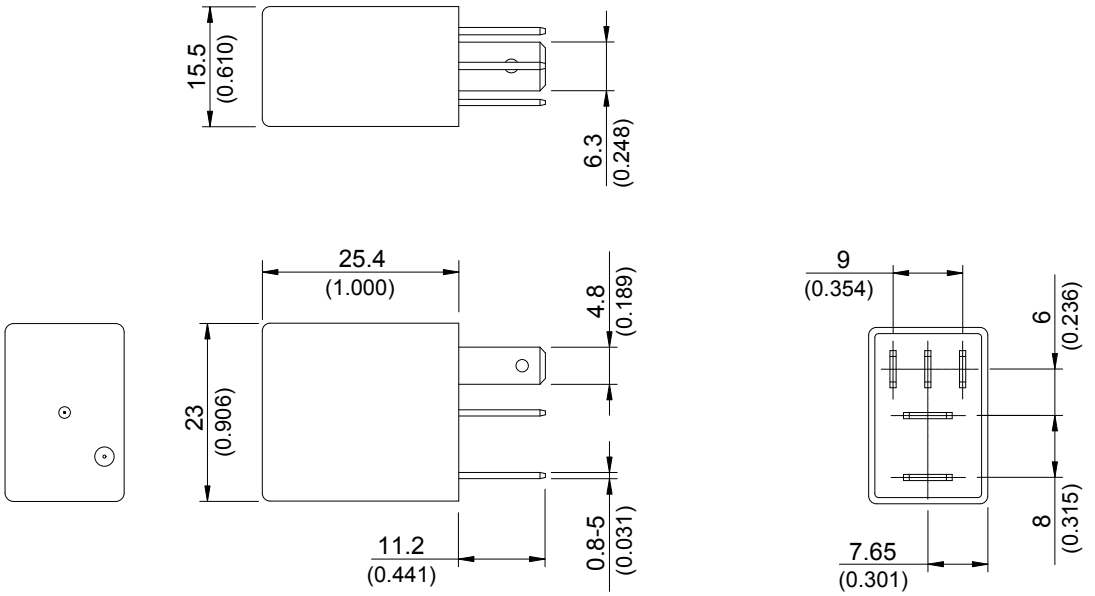
◆871 (C,D)



◆871 (DF)



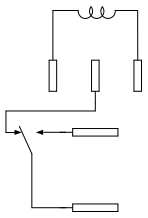
◆871 (S,V)



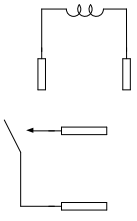
Wiring Diagram

BOTTOM VIEW

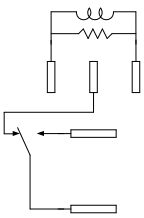
1C



1A

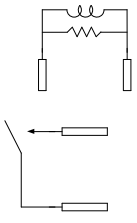


1C



PROVIDED WITH RESISTOR

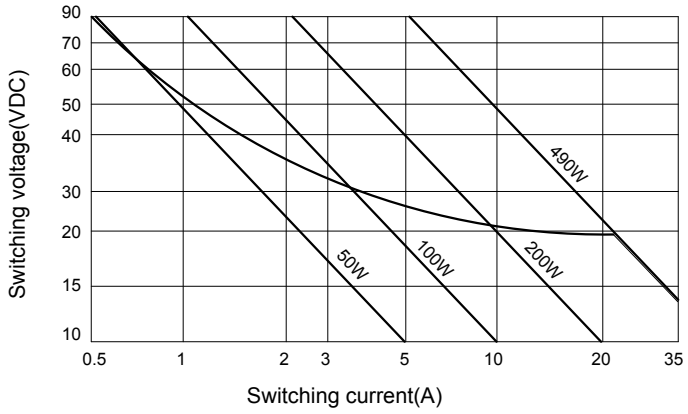
1A



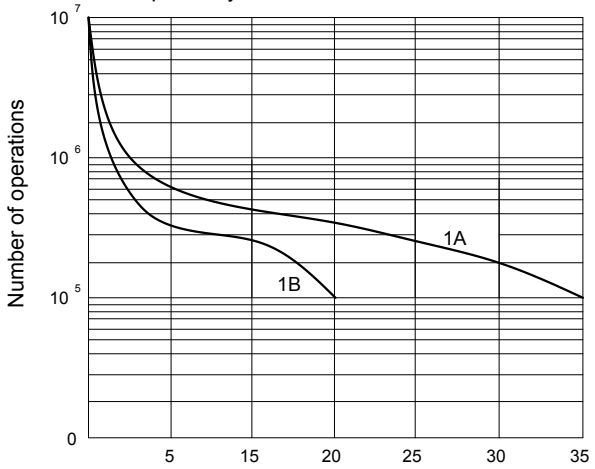
PROVIDED WITH RESISTOR

Engineering Data

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

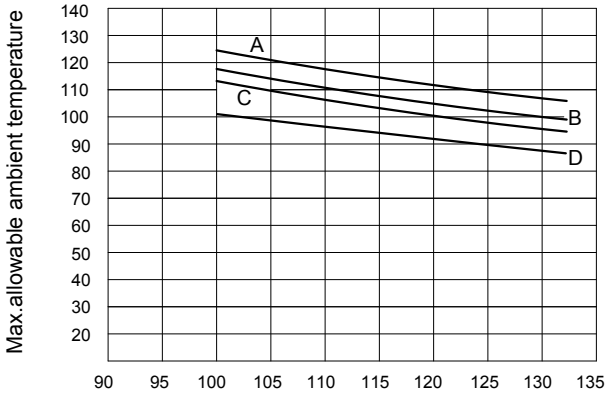


Life expectancy



14VDC resistive load/Switching current(A)

Ambient temperature vs coil voltage for continuous duty



A:15A B:20 C:25 D:35A Contact load(resistive)

Maximum mean coil temperature=155℃

Operate time/Release time