# HRS4(H) Relay

#### 1.COIL DATA

1-1.Nominal Voltage
1-2.Coil Resistance
1-3.Operate Voltage
1-4.Release Voltage
Refer to Table 1
Refer to Table 1

1-4.Release Voltage Refer to Table 1 1-5.Nominal Power Consumption 360 to 450 mW



HRS4(H) Relay

#### 2.CONTACT DATA

2-1.Contact Arrangement 1 Form A,1 Form C

2-2.Contact Material AgAlloy

2-3.Contact Rating 10A 120VAC/24VDC, 10A/6A250VAC(1C)

15A 120VAC/24VDC,10A 250VAC(1A)

TV-5

2-4.Max.Switching Voltage 110VDC/240VAC

2-5.Max.Switching Current 15A

2-6.Max.Switching Power 1800VA,360W

2-7.Contact Resistance(Initial) ≤50m \(\Omega\). at 6VDC 1A

2-8.Life Expectancy

Electrical 100,000 operations at nominal load

Mechanical 10,000,000 operations

### **3.GENERAL DATA**

3-1.Insulation Resistance Min.1000M Ω. at 500VDC

3-2.Dielectric Strength 750VAC,1min between open contacts

1,500VAC,1min between contacts and coil

3-3.Operate Time Max.10ms
3-4.Release Time Max.5ms
3-5.Temperature Range -30 to +85°C

3-6.Shock Resistance

Endurance 1,000m/s
Misoperation 100m/s

3-7. Vibration Resistance

Endurance 10 to 55Hz,1.5mm Double Amplitude
Misoperation 10 to 55Hz,1.5mm Double Amplitude

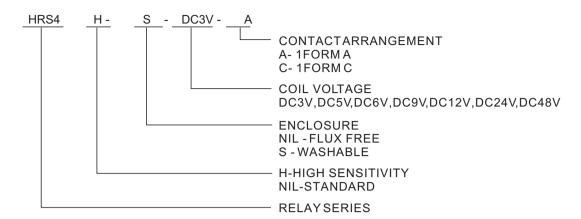
 $3-8. \text{Heating} \qquad \qquad 80\pm 2\,^{\circ}\text{C 96hs}$   $3-9. \text{Cold} \qquad \qquad -40\pm 2\,^{\circ}\text{C 96hs}$   $3-10. \text{Humidity} \qquad \qquad 35\% \text{ to } 85\% \text{RH}$ 

3-11.Weight 12gr.

3-12.Safety Standard UL NO.E164730

TUV NO.50036455 CSA NO.LR109368 CQC NO.02001001299

### 4. ORDERING CODE



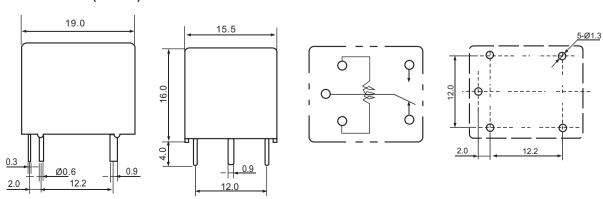
### 5.COIL DATA CHART

at 20°C

ORDERING CODE	COIL VOLTAGE VDC	COIL RESISTANCE []-/-10%	OPERATE VOLTAGE VDC	RELEASE VOLTAGE VDC	POWER CONSUMPTION mW
HRS4-(S)- DC 3V	3	20	2.1	0.30	
HRS4-(S) -DC 5V	5	50	3.5	0.50	-
HRS4-(S) -DC 6V	6	80	4.2	0.60	
HRS4-(S) -DC 9V	9	180	6.3	0.90	450
HRS4-(S) -DC 12V	12	320	8.4	1.20	
HRS4-(S) -DC 24V	24	820	16.8	2.40	
HRS4-(S) -DC 48V	48	5200	33.6	4.80	
HRS4H-(S)- DC3V	3	25	2.1	0.30	
HRS4H-(S) -DC 5V	5	70	3.5	0.50	
HRS4H-(S) -DC 6V	6	100	4.2	0.60	
HRS4H-(S) -DC 9V	9	225	6.3	0.90	360
HRS4H-(S) -DC 12V	12	400	8.4	1.20	
HRS4H-(S) -DC 24V	24	1600	16.8	2.40	
HRS4H-(S) -DC 48V	48	6400	33.6	4.80	

Table 1

## 6.DIMENSIONS (in mm)



## 7.HRS4(H) CHARACTERISTIC DATA

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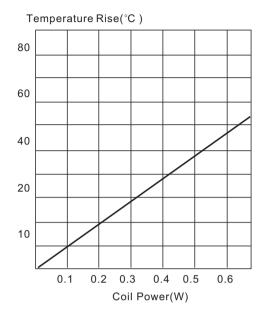
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Time(ms)

Operate

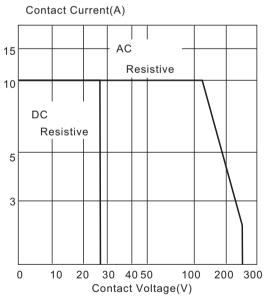
Timing

Coil Temperature Rise



2 Release
0 0.1 0.2 0.3 0.4 0.5 0.6 0.8 1.0 1.2 1.4
Coil Power(W)

# Maximum Switching Power



### Life Curve

