

# HRS2H

SIGNAL RELAY

## Safety Approval

US No. E164730



No. 50097843

## Features

- Microminiature relay  
Dimension: 20.3×9.9×11.4 (mm)
- High sensitivity
- 2 Form C contacts



## ORDERING INFORMATION

HRS2H - <span style="border: 1px solid black; padding: 2px;">S</span> - <span style="border: 1px solid black; padding: 2px;">DC12V</span> - <span style="border: 1px solid black; padding: 2px;">T</span>			
Model	Enclosure	Coil Voltage	Coil Sensitivity
	S - Plastic Sealed Type	DC3V, DC5V, DC6V DC9V, DC12V, DC24V	Blank: 450mW T - High Sensitivity (150mW) N - Sensitivity (200mW) B - Standard 360mW (48VDC:400mW)

Remarks: 1. Available in 2 Form C only    2. Contact rating: 1A, 2A

## SPECIFICATION

### CONTACT DATA

Contact Form		2 Form C
Contact Material		AuAg overlay, Ag Alloy
Contact Rating		1A 120VAC/24VDC 2A 120VAC/24VDC
Contact Resistance		Max. 50mΩ (6VDC 0.1A)
Load	Max. Switching Voltage	125VAC/30VDC
	Max. Switching Current	2A
	Max. Switching Power	250VA, 60W
	Min. Switching Load	5VDC, 10mA
Life	Electrical	100,000 operations
	Mechanical	15,000,000 operations

### GENERAL DATA

Insulation Resistance		Min. 1000MΩ 500VDC
Dielectric Strength	Between open contacts	500VAC, 1min
	Between coil and contacts	1,000VAC, 1min
Operate Time		Max. 7ms
Release Time		Max. 3ms
Operating Temperature		-25°C to +70°C
Humidity		35~95%RH, +40°C
Surge Strength		1,500VAC, 10x160 μs
Shock Resistance	Endurance	1,000m/s <sup>2</sup>
	Misoperation	100m/s <sup>2</sup>
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude
Weight		Approximately 5.0g

Note: Data shown are of initial value

### COIL DATA

Nominal Coil Power	150mW, 200mW, 360mW, 450mW
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## SAFETY APPROVAL

File Number	Contact Form	Power Consumption	Coil Voltage	Contact Rating	Remark
UL E164730	C	0.15W/0.20W/0.36W	3-48VDC	1A 120VAC/24VDC	Ambient Temperature: 85°C
				2A 120VAC/24VDC	
	C	0.45W	3-48VDC	1A 120VAC/24VDC	
TUV 50097843	C	0.20W/0.36W	3-24VDC	1A 120VAC/24VDC	Ambient Temperature: 70°C

Specifications subject to change without notice

ISO9001, ISO/TS16949, ISO14001 Approved

# HRS2H

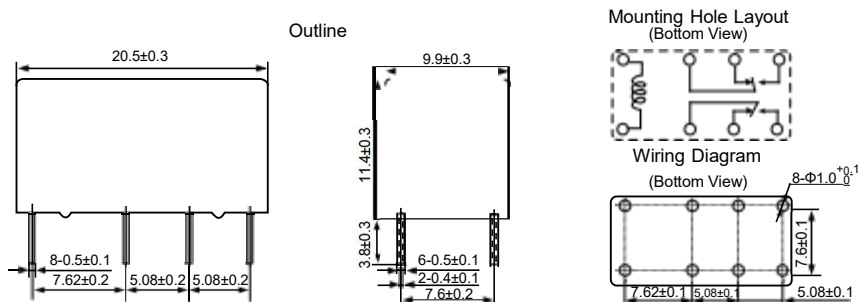
SIGNAL RELAY

## COIL DATA

Ambient Temperature: 23°C

Model	Nominal Voltage VDC	Coil Resistance $\Omega$ +/-10%	Operate Voltage $\leq$ VDC	Release Voltage $\geq$ VDC	Coil Power mW
HRS2H-S-DC3V-N	3	45	2.25	0.3	200
HRS2H-S-DC5V-N	5	125	3.75	0.5	
HRS2H-S-DC6V-N	6	180	4.5	0.6	
HRS2H-S-DC9V-N	9	405	6.75	0.9	
HRS2H-S-DC12V-N	12	720	9.0	1.2	
HRS2H-S-DC24V-N	24	2880	18.0	2.4	
HRS2H-S-DC48V-N	48	11520	36.0	4.8	
HRS2H-S-DC3V-T	3	60	2.25	0.3	
HRS2H-S-DC5V-T	5	166	3.75	0.5	
HRS2H-S-DC6V-T	6	240	4.5	0.6	
HRS2H-S-DC9V-T	9	540	6.75	0.9	
HRS2H-S-DC12V-T	12	960	9.0	1.2	
HRS2H-S-DC24V-T	24	3840	18.0	2.4	
HRS2H-S-DC48V-T	48	15360	36.0	4.8	
HRS2H-S-DC3V-B	3	25	2.25	0.3	360
HRS2H-S-DC5V-B	5	69.4	3.75	0.5	
HRS2H-S-DC6V-B	6	100	4.5	0.6	
HRS2H-S-DC9V-B	9	225	6.75	0.9	
HRS2H-S-DC12V-B	12	400	9.0	1.2	
HRS2H-S-DC24V-B	24	1600	18.0	2.4	
HRS2H-S-DC48V-B	48	5760	36.0	4.8	400
HRS2H-S-DC3V	3	20	2.25	0.3	450
HRS2H-S-DC5V	5	55.6	3.75	0.5	
HRS2H-S-DC6V	6	80	4.5	0.6	
HRS2H-S-DC9V	9	180	6.75	0.9	
HRS2H-S-DC12V	12	320	9.0	1.2	
HRS2H-S-DC24V	24	1280	18.0	2.4	
HRS2H-S-DC48V	48	5120	36.0	4.8	

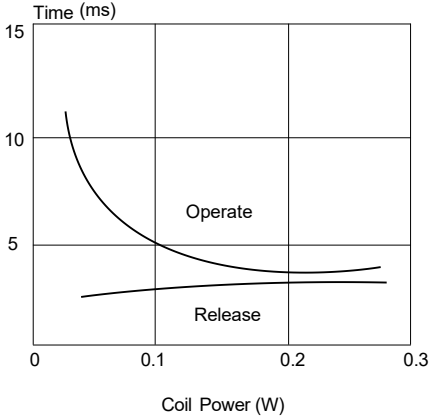
## OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)



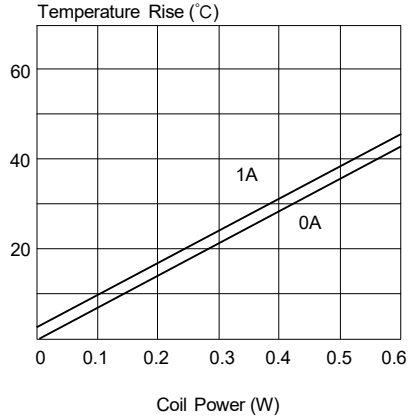
ISO9001, ISO/TS16949, ISO14001 Approved

## REFERENCE DATA

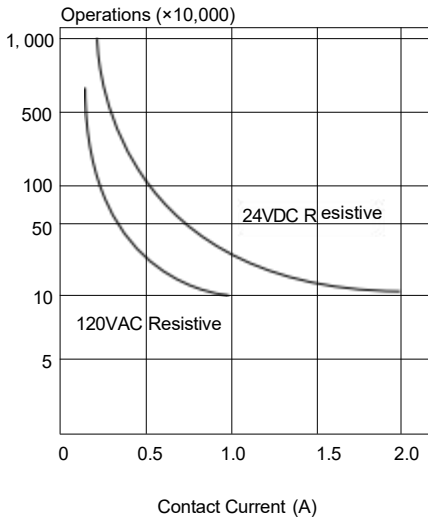
### Timing



### Coil Temperature Rise



### Life Curves



### Maximum Switching Power

