

# HR94

## 2-Pole gold-flashed 5A relay

### Features

- 2 form C contacts arrangement
- High reliable gold-flashed contacts
- Epoxy sealed type
- Basic grid (one inch)

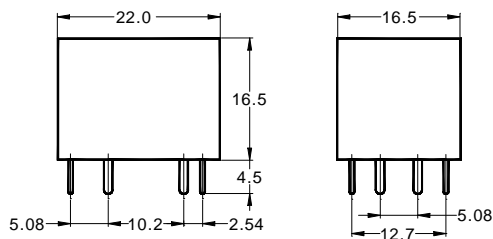


### Applications

- Home appliance, Industrial control

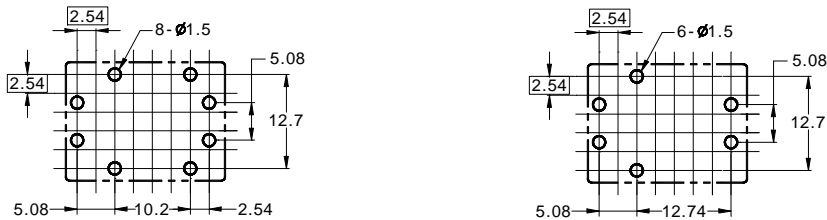
### Dimensions (mm)

To convert into inches, multiply by 0.03937



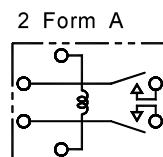
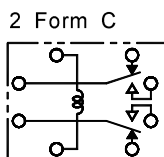
### PC Board Layout

Copper-side view



### Schematic

Copper-side view



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## Contact data

Arrangement	2 Form A (DPST)	2 Form C (DPDT)	
Contact material	Ag Alloy gold flashed		
Initial contact resistance	100m $\Omega$ max.		
Rated load, resistive		NO	NC
	5A 28VDC 5A 120VAC	5A 28VDC 5A 120VAC	3A 28VDC 3A 120VAC
Maximum carry current	5A	5A	3A
Maximum switching capacity	with DC voltage: 140W with AC voltage: 600VA	140W 600VA	84W 360VA
Maximum switching voltage	50VDC 380VAC		

## Coil data

Nominal voltage	3VDC to 24VDC
Nominal power consumption <sup>1)</sup>	500mW
Operate voltage <sup>2)</sup>	75% of nominal voltage
Release voltage <sup>3)</sup>	10% of nominal voltage

<sup>1), 2), 3)</sup>The values depend on coil voltage, see Part selection chart

## General data

Operate time	10ms max. at nominal voltage
Release time	5ms max. at nominal voltage
Initial insulation resistance	100 M $\Omega$ min. (500VDC)
Dielectric strength	Between open contacts: 750VAC <sub>rms</sub> for 1 minute Between contacts and coil: 1,000VAC <sub>rms</sub> for 1 minute
Expected life	Mechanical: More than 10,000,000 operations Electrical: More than 100,000 operations at rated load
Vibration resistance	Functional: 10~55Hz dual amplitude: 1.5mm Destructive: 10~55Hz dual amplitude: 1.5mm
Shock resistance	Functional: 10G min. Destructive: 100G min.
Ambient temperature	-40°C to +70°C (with no icing)
Humidity	35% to 85% RH
Weight	12g approx.

Note: The above figures are initial values

# HR94

## Part number description



**HR94** 

**Contact arrangement**

C: 2 Form C  
A: 2 Form A

**Coil voltage**

DC03: 3VDC    DC09: 9VDC  
DC06: 6VDC    DC12: 12VDC  
DC24: 24VDC

Part number description is provided for reference, part number can not be arbitrarily composed. Refer to the part numbers shown in the table below. Special designs to customer specifications are possible; please contact HR.

## Part selection

Part number	Nominal voltage (VDC)	Coil resistance ( $\Omega \pm 10\%$ )	Nominal current (mA)	Must operate voltage (VDC)	Must release voltage (VDC)	Max voltage (VDC)	Nominal power (mW)
<b>1 Form A</b>							
HR94A DC03	3	18	166.6	2.25	0.3	3.9	500
HR94A DC06	6	72	83.3	4.50	0.6	7.8	
HR94A DC09	9	162	55.5	6.75	0.9	11.7	
HR94A DC12	12	288	41.6	9.00	1.2	15.6	
HR94A DC24	24	1,152	20.8	18.00	2.4	31.2	
<b>1 Form C</b>							
HR94C DC03	3	18	166.6	2.25	0.3	3.9	500
HR94C DC06	6	72	83.3	4.50	0.6	7.8	
HR94C DC09	9	162	55.5	6.75	0.9	11.7	
HR94C DC12	12	288	41.6	9.00	1.2	15.6	
HR94C DC24	24	1,152	20.8	18.00	2.4	31.2	

Note: All values in the chart are measured at 23°C