

# HR703V

## 1 Pole 10A cubic relay

### Features

- 10A carry current contact
- Epoxy sealed type standard
- Gold flashed contact type available

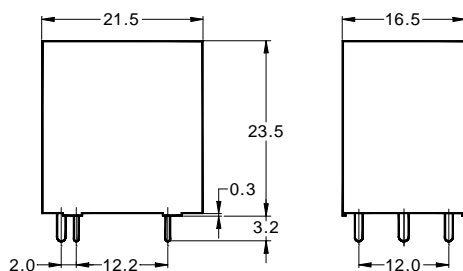
### Applications

- Home appliance, Office equipment,  
Vending machine, Industrial control



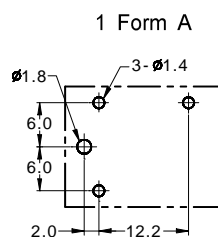
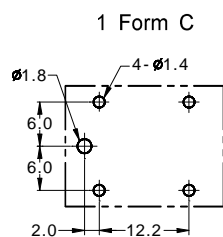
### Dimensions (mm)

To convert into inches, multiply by 0.03937



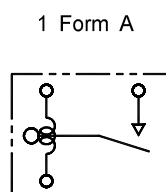
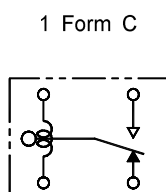
### PC Board Layout

Copper-side view



### Schematic

Copper-side view



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## Contact data

Arrangement	1 Form A (SPST) to 1 Form C (SPDT)	
Contact material	AgCdO	
Initial contact resistance	100m $\Omega$ max.	
Rated load, resistive	10A 30VDC 10A 250VAC	
Maximum carry current	10A	
Maximum switching capacity	with DC voltage: with AC voltage:	300W 2,500VA
Maximum switching voltage	110VDC 380VAC	

## Coil data

Nominal voltage	5VDC to 48VDC
Nominal power consumption <sup>1)</sup>	360mW
Operate voltage <sup>2)</sup>	80% 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	15ms max. at nominal voltage	
Release time	10ms max. at nominal voltage	
Initial insulation resistance	100 M $\Omega$ min. (500VDC)	
Dielectric strength	Between open contacts: Between contacts and coil:	750VAC <sub>rms</sub> for 1 minute 1,500VAC <sub>rms</sub> for 1 minute
Expected life	Mechanical: Electrical:	More than 10,000,000 operations More than 100,000 operations at rated load
Vibration resistance	Functional: Destructive:	10~55Hz dual amplitude: 1.5mm 10~55Hz dual amplitude: 1.5mm
Shock resistance	Functional: Destructive:	10G min. 100G min.
Ambient temperature	-20°C to +70°C (with no icing)	
Humidity	35% to 85% RH	
Weight	9.5g approx.	

Note: The above figures are initial values

# HR703V

## Part number description



**HR703V**

### Contact arrangement

None: 1 Form C  
A: 1 Form A

### Coil voltage

DC05V: 5VDC DC12V: 12VDC  
DC06V: 6VDC DC24V: 24VDC  
DC09V: 9VDC DC48V: 48VDC

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

Distributor stock item

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)
1 Form A							
HR703VA DC05V	5	70	72	4.0	0.5	6.5	360
HR703VA DC06V	6	100	60	4.8	0.6	7.8	
HR703VA DC09V	9	225	40	7.2	0.9	11.7	
HR703VA DC12V	12	400	30	9.6	1.2	15.6	
HR703VA DC24V	24	1,600	15	19.2	2.4	31.2	
HR703VA DC48V	48	6,400	7.5	38.4	4.8	62.4	
1 Form C							
HR703V DC05V	5	70	72	4.0	0.5	6.5	360
HR703V DC06V	6	100	60	4.8	0.6	7.8	
HR703V DC09V	9	225	40	7.2	0.9	11.7	
HR703V DC12V	12	400	30	9.6	1.2	15.6	
HR703V DC24V	24	1,600	15	19.2	2.4	31.2	
HR703V DC48V	48	6,400	7.5	38.4	4.8	62.4	

Note: All values in the chart are measured at 23℃