

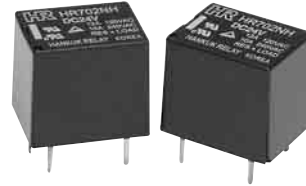
HR702

RoHS 대응품

10A-15A 1-pole power relay

Features

- Low profile version of HR703H
- Clearance and creepage distances of the basic insulation conforms to VDE0435 and VDE0700
- Sealed immersion cleanable type



Applications

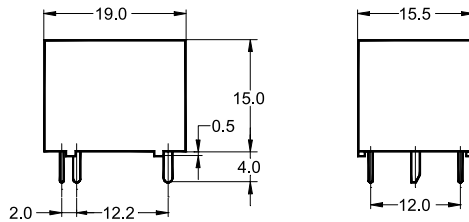
- Home appliance, Heater control, Industrial control emergency lighting

Approvals



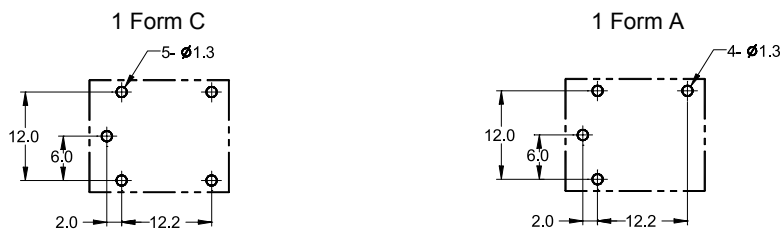
Dimensions (mm)

To convert into inches, multiply by 0.03937



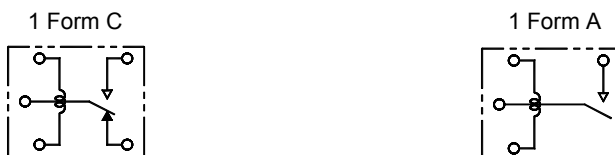
PC Board Layout

Copper-side view



Schematic

Copper-side view



Contact data

Arrangement	1 Form A (SPST), 1 Form C (SPDT)	
Contact material	Ag Alloy	
Initial contact resistance	100mΩ max.	
Rated load, resistive	Standard (NH type)	High capacity (HH type)
	10A 24VDC 10A 120VAC	15A 24VDC 15A 120VAC TV-5
Maximum carry current	10A	15A
Maximum switching capacity	with DC voltage:	240W
	with AC voltage:	1,200VA
Maximum switching voltage	110VDC	360W
	240VAC	1,800VA
Minimum switching rating ¹⁾	100mA 5VDC	

¹⁾ Min. Switching Load mentioned above are reference values. Therefore it is recommended to perform the confirmation test with the actual load before production since reference values may vary according to switching frequencies, environmental conditions and expected reliability levels.

Coil data

Nominal voltage	3VDC to 48VDC
Nominal power consumption ²⁾	360mW
Operate voltage ³⁾	Standard coil: 75% of nominal voltage
Release voltage ⁴⁾	10% of nominal voltage

^{2), 3), 4)} The values depend on coil voltage, see Part selection chart

General data

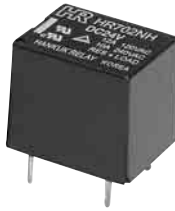
Operate time	10ms max. at nominal voltage
Release time	5ms max. at nominal voltage
Initial insulation resistance	100 MΩ min. (500VDC)
Dielectric strength	Between open contacts:
	Between contacts and coil:
Expected life	Mechanical: More than 10,000,000 operations Electrical: More than 100,000 operations at rated load
Vibration resistance	Functional:
	Destructive:
Shock resistance	Functional:
	Destructive:
Ambient temperature	-40°C to +85°C (with no icing)
Humidity	35% to 85% RH
Weight	9.5g approx.

Note: The above figures are initial values

HR702

RoHS 대응품

Part number description



HR702

Contact arrangement

None: 1 Form C
C: 1 Form A

Contact ratings

NH: 10A 120VAC
HH: 15A 120VAC

Coil voltage

DC03V: 3VDC DC09V: 9VDC
DC05V: 5VDC DC12V: 12VDC
DC06V: 6VDC DC24V: 24VDC
DC48V: 48VDC

P.C. BOARD POWER RELAY

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)
Contact rating NH type, 1 Form C							
HR702NHDC03V	3	25	120	2.25	0.3	3.9	360
HR702NHDC05V	5	70	72	3.75	0.5	6.5	
HR702NHDC06V	6	100	60	4.50	0.6	7.8	
HR702NHDC09V	9	225	40	6.75	0.9	11.7	
HR702NHDC12V	12	400	30	9.00	1.2	15.6	
HR702NHDC24V	24	1,600	15	18.00	2.4	31.2	
HR702NHDC48V	48	6,400	7.5	36.00	4.8	62.4	
Contact rating NH type, 1 Form A							
HR702ANHDC03V	3	25	120	2.25	0.3	3.9	360
HR702ANHDC05V	5	70	72	3.75	0.5	6.5	
HR702ANHDC06V	6	100	60	4.50	0.6	7.8	
HR702ANHDC09V	9	225	40	6.75	0.9	11.7	
HR702ANHDC12V	12	400	30	9.00	1.2	15.6	
HR702ANHDC24V	24	1,600	15	18.00	2.4	31.2	
HR702ANHDC48V	48	6,400	7.5	36.00	4.8	62.4	

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

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)
Contact rating HH type, 1 Form C							
HR702HHDC03V	3	25	120	2.25	0.3	3.9	360
HR702HHDC05V	5	70	72	3.75	0.5	6.5	
HR702HHDC06V	6	100	60	4.50	0.6	7.8	
HR702HHDC09V	9	225	40	6.75	0.9	11.7	
HR702HHDC12V	12	400	30	9.00	1.2	15.6	
HR702HHDC24V	24	1,600	15	18.00	2.4	31.2	
HR702HHDC48V	48	6,400	7.5	36.00	4.8	62.4	
Contact rating HH type, 1 Form A							
HR702AHHDC03V	3	25	120	2.25	0.3	3.9	360
HR702AHHDC05V	5	70	72	3.75	0.5	6.5	
HR702AHHDC06V	6	100	60	4.50	0.6	7.8	
HR702AHHDC09V	9	225	40	6.75	0.9	11.7	
HR702AHHDC12V	12	400	30	9.00	1.2	15.6	
HR702AHHDC24V	24	1,600	15	18.00	2.4	31.2	
HR702AHHDC48V	48	6,400	7.5	36.00	4.8	62.4	

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