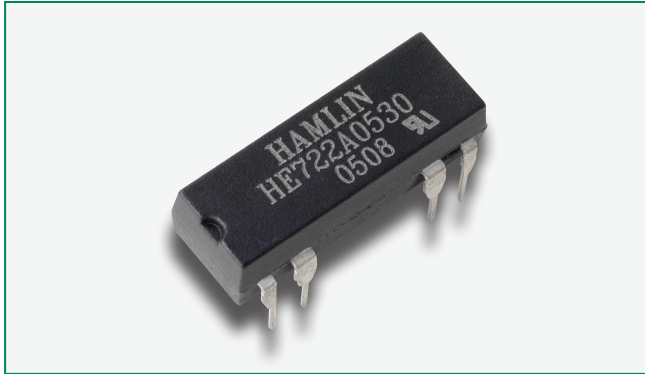


HE700 Miniature Dual In-line Reed Relay



Description

The HE700 is a miniature reed relay in a DIL package with a choice of normally open, normally open high voltage, normally closed or changeover contacts capable of switching up to 300Vdc at 10W. It is available with 5V, 12V, and 24V coils and diode suppression and also available with magnetic shield option.

Features

- Miniature dual in-line package
- Optional coil suppression diode to protect coil drive circuits
- External magnetic shield option
- Diode suppression option
- RoHS Compliant

Benefits

- One relay, various contacts choices reducing space and cost without compromising flexibility
- Lower power coil consumption than competing electromechanical devices.
- Hermetically sealed switching contact is immune to the effects of its environment
- Transfer molded package gives maximum component protection

Agency Approvals

Agency	Agency File Number
	E47258

Note: Contact Littelfuse for specific agency approval ratings.

Applications

- Security Systems
- Telecom Equipments
- Process Control Systems
- Industrial Equipments
- Instrumentation

Dimensions

Dimensions in mm (inch)

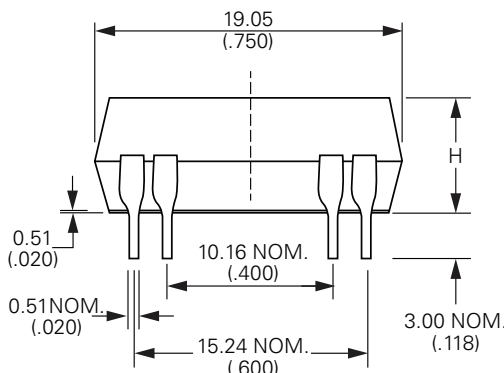


Fig. 1: HE700

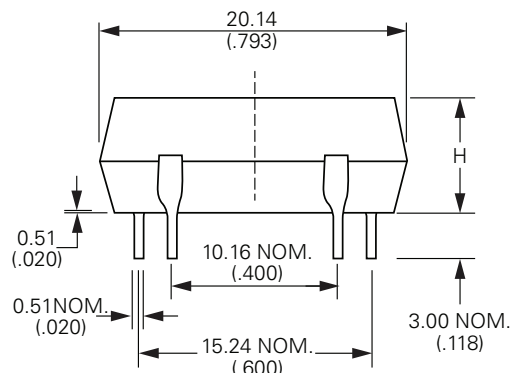


Fig. 2: HE751

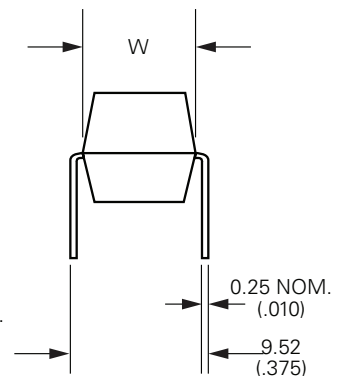


Fig. 3: HE700 (All)

Table 1: Dimension

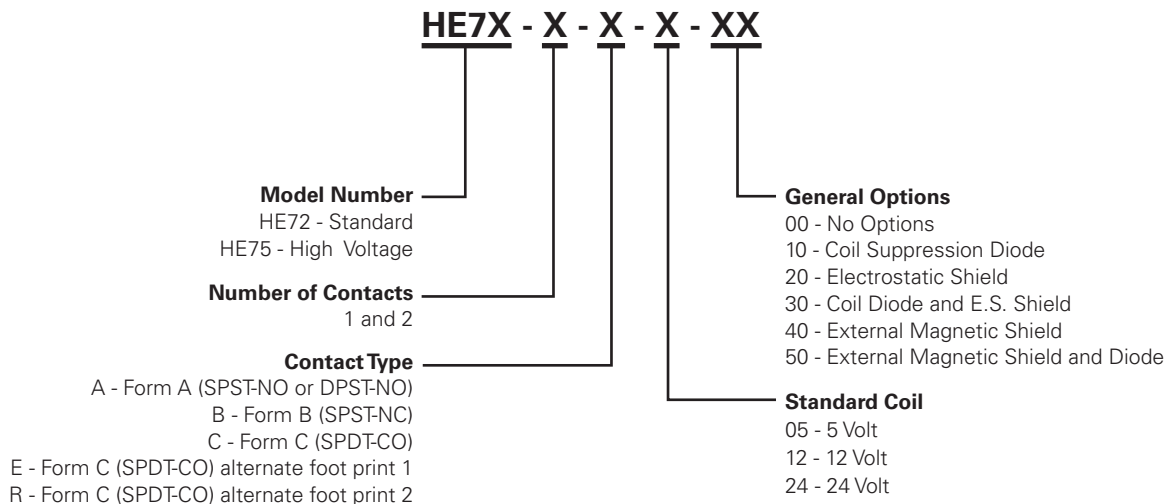
Relay Type	Body Type	L	W	H
HE700	Transfer Molded	19.05 (.750)	7.22 (.284)	5.50 (.217)
	External Shield	20.14 (.793)	7.62 (.300)	5.82 (.229)

HE700 Miniature Dual In-line Reed Relay

Table 2: Electrical and Operating Characteristics @ 25°C

Column Number			1	2	3	4
Contact Type			Form A SPST, DPST Standard	Form C SPDT-CO Standard	Form A SPST High Voltage	Form B SPST-NC Standard
Relay Types			HE721, HE722	HE721C/E/R	HE751	HE721
Contact Rating ¹	Power, Switching	Watt - max.	10	5	10	10
	Voltage, Switching	Vdc - max.	200	175	300	200
	Current, Switching	A - max.	0.5	0.25	0.5	0.5
	Current, Carry	A - max.	1.2	1.5	1.2	1.5
Voltage Hold-off ⁴	Across Open Contacts	Vdc - min.	250	200	450	250
	Contacts to Coil	Vac - min.	500	500	4000	500
	Coil to E. Shield	Vac - min.	150	150	N/A	N/A
	Between Isolated Terminals	Vac - min.	500	N/A	N/A	N/A
Resistance ⁵	Contact, Initial	Ω max.	0.150	0.200	0.150	0.150
	Insulation Across Open Contacts	Ω min.	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰
	Insulation Between Isolated Terminals	Ω min.	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰
Timing	Operate Time	ms - max.	1.0	3.0	1.0	1.0
	Release Time	ms - max.	1.0	3.0	1.0	1.0
Environmental	Temperature, Operating	°C	-40 to +85	-40 to +85	-20 to +85	-40 to +85
	Temperature, Storage	°C	-40 to +105	-40 to +105	-40 to +105	-40 to +105
	Vibration Resistance	G - max. 10-2000 Hz.	20	20	20	20
	Shock Resistance	G - max. 11 ms ½ sine	50	50	50	50

Part Numbering System



Note: Not all combinations of Part Number suffixes are available. Contact Littelfuse for details.

HE700 Miniature Dual In-line Reed Relay

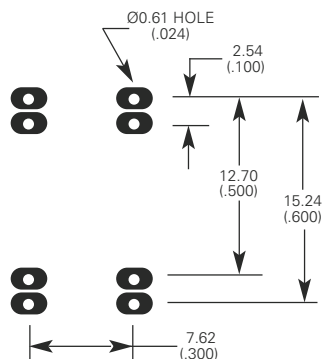
Table 3: Coil Characteristics @ 25°C

Contact Form	Electrical and Operating Characteristics	Dimensions	Part Number	Nominal Coil Voltage Vdc	Coil Resistance $\pm 10\%$ Ohms	Must Operate Vdc	Must Release Vdc	Maximum Coil Voltage Vdc	Top View 2.54mm (0.1") Grid Dot on Case: Pin 1 Numbers not printed on case.
1A SPST-NO	See Table 2 Column 1	Figure 1	HE721A0500	5	500	3.75	0.5	12	
			HE721A1200	12	1000	8.0	1.0	31	
			HE721A2400	24	2150	16.0	2.0	46	
1B SPST-NC	See Table 2 Column 4	Figure 1	HE721B0500	5	500	3.75	0.5	6.5	
			HE721B1200	12	500	9.0	1.0	14	
			HE721B2400	24	2150	18.0	2.0	28	
1C SPDT-CO	See Table 2 Column 2	Figure 1	HE721C0500	5	200	3.75	0.5	14	
			HE721C1200	12	500	8.0	1.0	22	
			HE721C2400	24	2000	16.0	2.0	44	
1C SPDT-CO	See Table 2 Column 2	Figure 1	HE721E0500	5	200	3.75	0.5	14	
			HE721E1200	12	500	8.0	1.0	22	
			HE721E2400	24	2000	16.0	2.0	44	
1C SPDT-CO	See Table 2 Column 2	Figure 1	HE721R0500	5	200	3.75	0.5	14	
			HE721R1200	12	500	8.0	1.0	22	
			HE721R2400	24	2000	16.0	2.0	44	
2A DPST-NO	See Table 2 Column 1	Figure 1	HE722A0500	5	200	3.75	0.5	12	
			HE722A1200	12	500	8.0	1.0	22	
			HE722A2400	24	2150	16.0	2.0	46	
1A SPST-NO High Voltage	See Table 2 Column 3	Figure 2	HE751A0500	5	500	3.75	0.5	12	
			HE751A1200	12	1000	8.0	1.0	31	
			HE751A2400	24	2150	16.0	2.0	46	

Notes:

- HE721B - Exceeding recommended voltage may cause contact reclosure.
- Optional external magnetic shield not available on Form B relays.

HE700 PCB LAYOUT (Bottom View)



Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	1000/5000	N/A	N/A

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

HE721A1240	HE721R1200	HE721A0520	HE721A1230	HE721A2420	HE721A1250	HE721R1210	HE722A2440
HE722A2450	HE721C1240	HE721C0550	HE722A1220	HE721R2400	HE722A2420	HE721C0530	HE722A1240
HE721A2440	HE721C0520	HE721A2430	HE721C1220	HE722A1230	HE751A2400	HE721C1250	HE722A0530
HE721C2440	HE721A0530	HE721C0540	HE722A1250	HE751A1200	HE722A0540	HE722A2430	HE721A1220
HE721R2410	HE722A0550	HE751A0500	HE721C1230	HE722A0520	HE721A0550	HE721A2450	HE721C2430
HE721C2420	HE721R0500	HE721A0540	HE721C2450	HE751A0510	HE721A0500	HE722A1200	HE722A2400
HE721A0510	HE722A0510	HE721A2410	HE722A2410	HE751A1210	HE721C1210	HE721C0500	HE722A1210
HE722A0500	HE721C0510	HE721C1200	HE721C2410	HE721C2400	HE721A1210	HE721R0510	HE721A2400
HE751A2410	HE721A1200	HE722A0600	HE722A0610	HE721B0510	HE721E0510	HE721E2400	