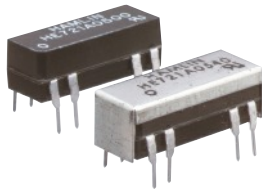


## HE700 D.I.L. Relay Features and Benefits



### Features

- Miniature dual in line package
- Choice of normally open, normally closed and change over contacts
- High voltage switching option
- Up to 2 normally open contacts
- Available with 5V, 12V or 24V coil options as standard
- Magnetic shield option
- Diode suppression option
- Diagonal coil option

### 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

### Applications

- Security
- Telecom
- Instrumentation
- Process Control
- Industrial

## DIMENSIONS (in) mm

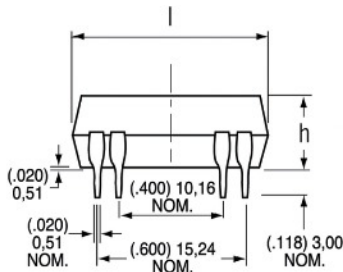


Figure 1 HE700

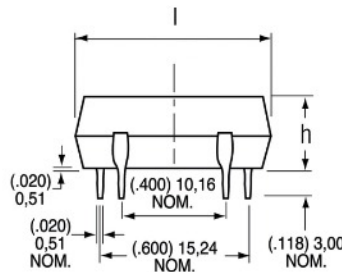


Figure 2 HE751

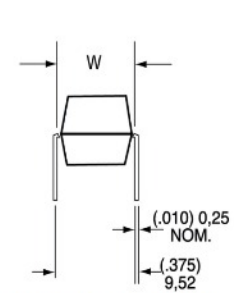
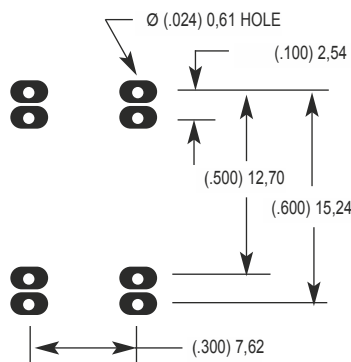


Figure 3 HE700 (All)

**Table 1**

Relay Type	Body Type	l	w	h
HE700	Transfer Molded	(.768) 19,50	(.284) 7,22	(.217) 5,50
	External Shield	(.793) 20,14	(.300) 7,62	(.229) 5,82

## HE700 PCB LAYOUT (Bottom View)      ORDERING INFORMATION



### PART NUMBER      HE7X   X   X   X   XX

**Model Number**  
 HE72 - Standard  
 HE75 - High Voltage

**Number of Contacts**  
 1,2

**Contact Type**  
 A - Form A (SPST-NO or DPST-NO)  
 B - Form B (SPST-NC)  
 C - Form C (SPDT-CO)  
 E - Form C (SPDT-CO) alternate foot print 1  
 R - Form C (SPDT-CO) alternate foot print 2

**General Options**  
 00 - No Options  
 10 - Coil Suppression Diode  
 20 - Electrostatic Shield  
 30 - Coil Diode and E.S. Shield  
 40 - External Magnetic Shield  
 50 - External Magnetic Shield and Diode

**Standard Coil**  
 05 - 5 Volt  
 12 - 12 Volt  
 24 - 24 Volt

**EXAMPLE:** The HE721A0540 is 1 Form A with a 5 Volt coil and external magnetic shield.

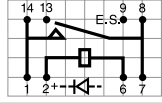
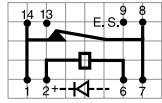
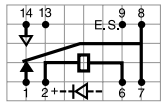
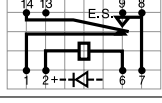
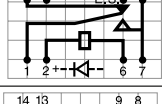
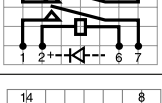
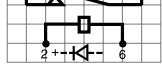
**See next page for: Electrical and Operating Characteristics Description and Coil Characteristics**

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**Table 2** HE700 Series Recognised File #E47258  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 RATINGS Contact Hamlin for specific load/life details	Power, Switching Voltage, Switching Current, Switching Current, Carry	Watt - max. Vdc - max. A - max. A - max.	10 200 0.5 1.2	5 175 0.25 1.5	10 300 0.5 1.2	10 200 0.5 1.2
VOLTAGE HOLD-OFF	Across Open Contacts Contacts to Coil Coil to E. Shield Between Isolated Terminals	Vdc - min. Vac - min. Vac - min. Vac - min.	250 500 150 500	200 500 150 N/A	450 4000 N/A N/A	250 500 N/A N/A
RESISTANCE	Contact, Initial Insulation Across Contacts Insulation Between Isolated Terminals	Ω - max. Ω - min. Ω - min.	0.150 10 <sup>10</sup> 10 <sup>10</sup>	0.200 10 <sup>10</sup> 10 <sup>10</sup>	0.150 10 <sup>10</sup> 10 <sup>10</sup>	0.150 10 <sup>10</sup> 10 <sup>10</sup>
TIMING	Operate Time Release Time	ms - max. ms - max.	1.0 1.0	3.0 3.0	1.0 1.0	1.0 1.0
ENVIRONMENTAL	Temperature, Operating Temperature, Storage Vibration Resistance Shock Resistance	°C °C G - max. 10-2000 Hz. G - max. 11 ms ½ sine	-40 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50	-20 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50

**Table 3** HE700 Series Miniature Relay Coil Characteristics @ 25°C.

Contact Form	Electrical & Operating Characteristics	Dimensions	Part Number	Nominal Coil Voltage Vdc	Coil Resistance ± 10% Ohms	Must Operate Vdc	Must Release Vdc	Maximum Coil Voltage Vdc	Top View 2,54 mm, 0.1 in. 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	See Note 1, 2 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: 1) HE721B - Exceeding recommended voltage may cause contact reclosure.  
2) Optional external magnetic shield not available on Form B relays.

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[HE722A2450](#) [HE721C1240](#) [HE721C0550](#) [HE722A1220](#) [HE722A2420](#) [HE722A1240](#) [HE721A2440](#) [HE721C0520](#)  
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## Littelfuse:

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