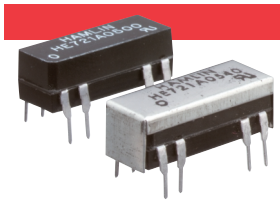
HE700 D.I.L. Relay Features and Benefits



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 moulded package gives maximum component protection

Applications

- Security
- Telecoms
- Instrumentation
- Process Control
- Industrial

DIMENSIONS (in) mm

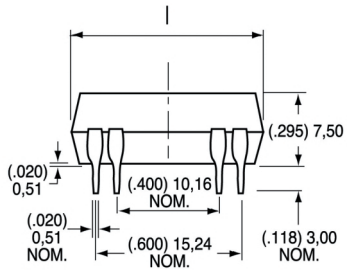


Figure 1 HE700

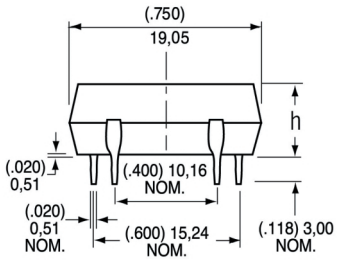


Figure 2 HE751

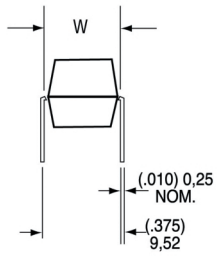
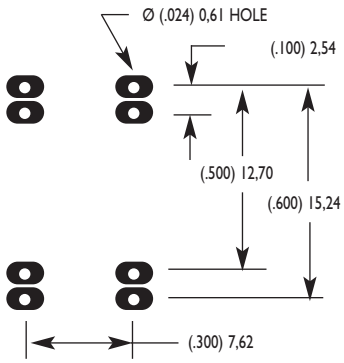


Figure 3 HE700 (All)

Table 1

Relay Type	Body Type	l	w	h
HE700	Transfer Molded External Shield	(.750) 19,05 (.795) 20,19	(.285) 7,24 (.300) 7,62	(.295) 7,50 (.305) 7,75

HE700 PCB LAYOUT (Bottom View)



ORDERING INFORMATION

PART NUMBER HE7X X X XX XX

Model Number
HE72 - Standard
HE75 - High Voltage

Number of Contacts
1,2

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

Contact Type
A - Form A (SPST-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

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

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

Contact the Hamlin Applications Engineering Department for low profile and other option combinations available.

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

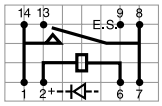
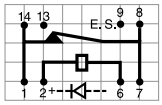
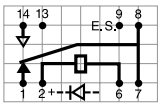
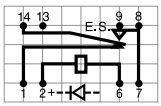
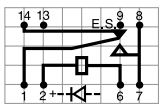
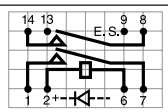
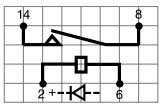
Hamlin USA Tel: +1 920 648 3000 • Fax: +1 920 648 3001 • Email: sales.us@hamlin.com
Hamlin UK Tel: +44 (0)1379 649700 • Fax: +44 (0)1379 649702 • Email: sales.uk@hamlin.com
Hamlin Germany Tel: +49 (0) 6181 953660 • Fax: +49 (0) 6181 9536666 • Email: sales.de@hamlin.com
Hamectrol France Tel: +33 (0) 1 4687 0202 • Fax: +33 (0) 1 4686 6786 • Email: sales.fr@hamlin.com

ISSUE No: 4 DATE: 1/5/3

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	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	1.2
VOLTAGE HOLD-OFF	Across Open Contacts	Vdc - min.	250	200	450	250
	Contacts to Coil	Vac - min.	500	500	2500	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	Contact, Initial	Ω - max.	0.150	0.200	0.150	0.150
	Insulation: Across Open Contacts	Ω - min.	10^{10}	10^{9}	10^{10}	10^{10}
	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

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 2, 3 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) The HE 700 Series is also available in low profile with (.225) 5,72mm height. Contact Hamlin for details.
2) HE721B - Exceeding recommended voltage may cause contact reclosure.
3) Optional external magnetic shield not available on Form B relays.

INFORMATION PROVIDED ON THIS DATA SHEET IS PROVIDED FOR INFORMATION PURPOSES ONLY AND SHOULD NOT BE RELIED UPON AS BEING ACCURATE FOR ANY PARTICULAR PURPOSE. Product performance may be affected by the application to which the product is put. Upon request, HAMLIN will assist purchasers by providing information specific to any particular application. HAMLIN disclaims any and all liability whatsoever for any purchaser's reliance upon the information contained on this data sheet without further consultation with authorised representatives of HAMLIN.