

## HE3300 S.I.L Relay Features and Benefits



### Features

- Miniature single in line package
- Available with 5V, 12V or 24V coil options as standard
- High voltage and power switching versions
- Normally open, normally closed, and change over contact configurations available
- External magnetic shield option

### Benefits

- Single in line configuration allows high packing densities, minimising space and cost
- 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
- Automatic Test Equipment

## DIMENSIONS (in) mm

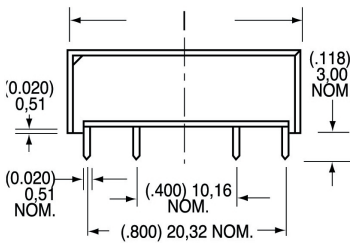


Figure 1 HE3321A, HE3351A, HE3361A, HE3321B

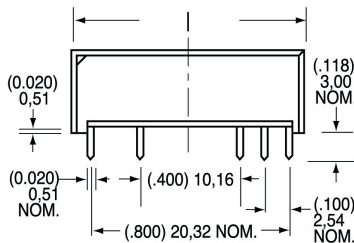


Figure 2 HE3321C

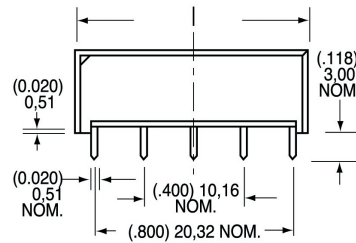


Figure 3 HE3321E

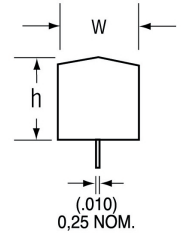
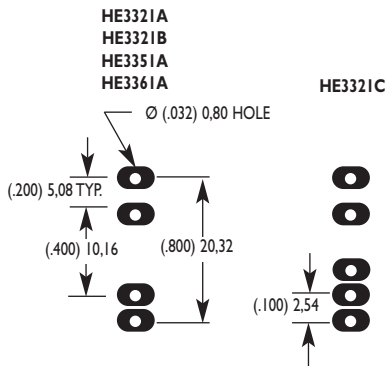


Figure 4 HE3300 (All)

Table 1

Relay Type	Body Type	l	w	h
HE3300	Transfer Molded	(.950) 24,13	(.300) 7,62	(.335) 8,51
	External Shield	(.980) 24,90	(.320) 8,12	(.345) 8,76

## HE3300 PCB LAYOUT (Bottom View)



## ORDERING INFORMATION

### PART NUMBER HE33XX X XX XX

#### Model Number

- HE3321 - Standard
- HE3351 - High Voltage
- HE3361 - Power Switching

#### 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

#### General Options

- 00 - No Options
- 40 - External Magnetic Shield

#### Standard Coil

- 05 - 5 Volt
- 12 - 12 Volt
- 24 - 24 Volt

**EXAMPLE:** The HE3321A0540 is a 1 Form relay with a 5 Volt coil and external magnetic shield

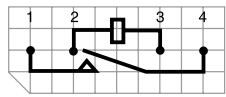
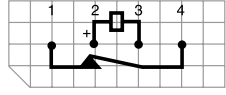
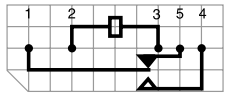
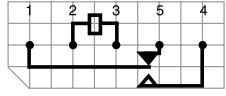
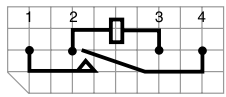
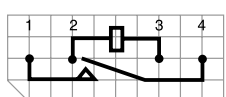
See next page for: **Electrical and Operating Characteristics Description and Coil Characteristics**

**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

**Table 2 HE3300 Series**  **Electrical and Operating Characteristics @ 25°C.**

Column Number			1	2	3	4	5
<b>Contact Type</b>			<b>Form A SPST-NO Standard</b>	<b>Form A SPST-NO High Voltage</b>	<b>Form A SPST-NO Power Switching</b>	<b>Form C SPST-CO Standard</b>	<b>Form B SPST-NC Standard</b>
<b>Relay Types</b>			<b>HE3321A</b>	<b>HE3351A</b>	<b>HE3361A</b>	<b>HE3321C, E</b>	<b>HE3321B</b>
<b>CONTACT RATINGS</b>	Power, Switching Contact Hamlin for specific load/life details	Watt - max. Vdc - max. A - max. A - max.	10 200 0.5 1.2	10 300 1.0 1.5	50 200 1.5 2.0	5 175 0.25 1.5	10 200 0.5 1.2
<b>VOLTAGE HOLD-OFF</b>	Across Open Contacts Contacts to Coil	Vdc - min. Vac - min.	250 2500	450 2500	300 2500	200 2500	250 2500
<b>RESISTANCE</b>	Contact, Initial Insulation: Across Open Contacts Between Isolated Terminals	Ω - max. Ω - min. Ω - min.	0.150 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>	0.200 10 <sup>9</sup> 10 <sup>10</sup>	0.150 10 <sup>10</sup> 10 <sup>10</sup>
<b>TIMING</b>	Operate Time Release Time	ms - max. ms - max.	1.0 1.0	1.0 1.0	1.0 1.0	3.0 3.0	1.0 1.0
<b>ENVIRONMENTAL</b>	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	-20 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50	-40 to +85 -40 to +105 20 50

**Table 3 HE3300 Series Relay** **Coil Characteristics @ 25°C.**

Contact Form & Type	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.
IA SPST-NO	See Table 2 Column 1	See Figure 1	HE3321A0400	5	500	3.75	0.5	22	
			HE3321A1200	12	500	9.0	1.0	22	
			HE3321A2400	24	2000	18.0	2.0	44	
IB SPST-NC	See Table 2 Column 5	See Figure 1	HE3321B0400	5	500	3.75	0.5	See Note 1, 2 6.5	
			HE3321B1200	12	500	9.0	1.0	14.0	
			HE3321B2400	24	2000	18.0	2.0	28.0	
IC SPDT-CO	See Table 2 Column 4	See Figure 2	HE3321C0500	5	125	3.75	0.5	11	
			HE3321C1200	12	500	9.0	1.0	22	
			HE3321C2400	24	2000	18.0	2.0	44	
IC SPDT-CO	See Table 2 Column 4	See Figure 3	HE3321E0500	5	125	3.75	0.5	11	
			HE3321E1200	12	500	9.0	1.0	22	
			HE3321E2400	24	2000	18.0	2.0	44	
IA SPST-NO High Voltage	See Table 2 Column 2	See Figure 1	HE3351A0500	5	125	3.75	0.5	11	
			HE3351A1200	12	500	9.0	1.0	22	
			HE3351A2400	24	2000	18.0	2.0	44	
IA SPST-NO Power Switching	See Table 2 Column 3	See Figure 1	HE3361A0500	5	125	3.75	0.5	11	
			HE3361A1200	12	500	9.0	1.0	22	
			HE3361A2400	24	2000	18.0	2.0	44	

- Notes: 1) HE3321B - Exceeding recommended voltage may cause contact closure.  
2) External magnetic shielding not available on 12 and 24 Volt 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.