

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

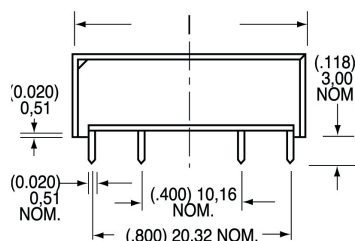


Figure 1 HE3321A, HE3351A, HE3361A, HE3321B

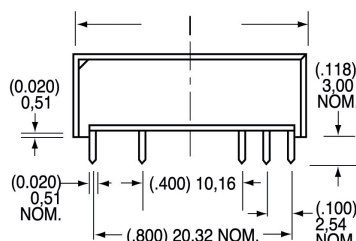


Figure 2 HE3321C

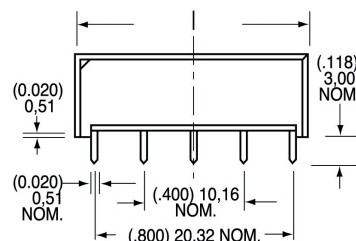


Figure 3 HE3321E

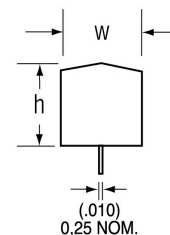
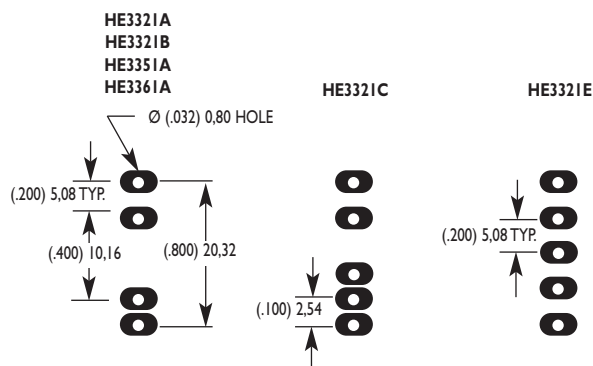


Figure 4 HE3300 (All)

Table I

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

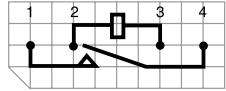
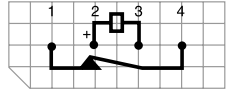
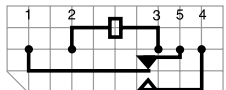
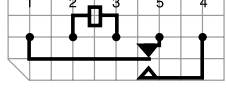
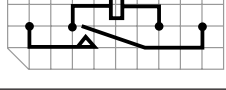
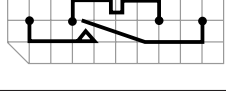
Standard Coil

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**

Table 2			HE3300 Series		Recognised File #E47258		Electrical and Operating Characteristics @ 25°C.				
Column Number			1	2	3	4	5				
Contact Type			Form A SPST-NO Standard	Form A SPST-NO High Voltage	Form A SPST-NO Power Switching	Form C SPST-CO Standard	Form B SPST-NC Standard				
Relay Types			HE3321A	HE3351A	HE3361A	HE3321C, E	HE3321B				
CONTACT RATINGS Contact Hamlin for specific load/life details	Power, Switching	Watt - max.	10	10	50	5	10				
	Voltage, Switching	Vdc - max.	200	300	200	175	200				
	Current, Switching	A - max.	0.5	1.0	1.5	0.25	0.5				
	Current, Carry	A - max.	1.2	1.5	2.0	1.5	1.2				
VOLTAGE HOLD-OFF	Across Open Contacts	Vdc - min.	250	450	300	200	250				
	Contacts to Coil	Vac - min.	2500	2500	2500	2500	2500				
RESISTANCE	Contact, Initial	Ω - max.	0.150	0.150	0.150	0.200	0.150				
	Insulation: Across Open Contacts	Ω - min.	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ⁹	10 ¹⁰				
	Between Isolated Terminals	Ω - min.	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ¹⁰				
TIMING	Operate Time	ms - max.	1.0	1.0	1.0	3.0	1.0				
	Release Time	ms - max.	1.0	1.0	1.0	3.0	1.0				
ENVIRONMENTAL	Temperature, Operating	°C	-40 to +85	-20 to +85	-40 to +85	-40 to +85	-40 to +85				
	Temperature, Storage	°C	-40 to +105	-40 to +105	-40 to +105	-40 to +105	-40 to + 105				
	Vibration Resistance	G - max.	20	20	20	20	20				
		10-2000 Hz.									
	Shock Resistance	G - max.	50	50	50	50	50				
		11 ms, ½ sine									

Table 3 HE3300 Series Relay						Coil Characteristics @ 25°C.			
Contact Form & Type	Electrical & 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 2,54 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 reclosure.
2) External magnetic shielding not available on 12 and 24 Volt Form B relays.

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