

HE3300 Features and Benefits

Features

- Miniature Single in line package
- Available with 5V, 12V or 24V coil options as standard
- Optional coil suppression diode to protect coil drive circuits
- 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

Applications

- Security
- Telecoms
- Instrumentation
- Process Control
- Automatic Test Equipment

DIMENSIONS

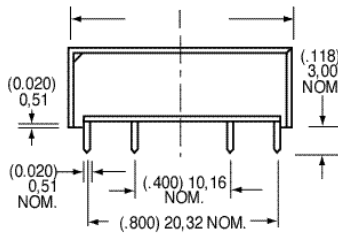


Figure 1 HE3321A, HE3351A, HE3361A, HE3321B

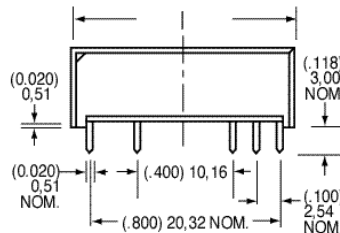


Figure 2 HE3321C

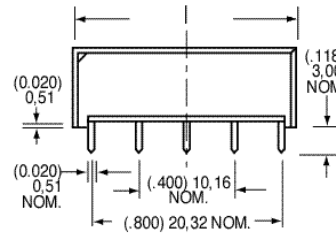


Figure 3 HE3321E

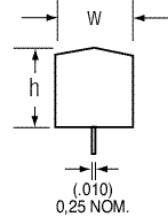
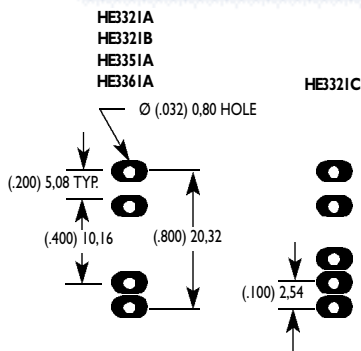


Figure 4 HE3300 (All)

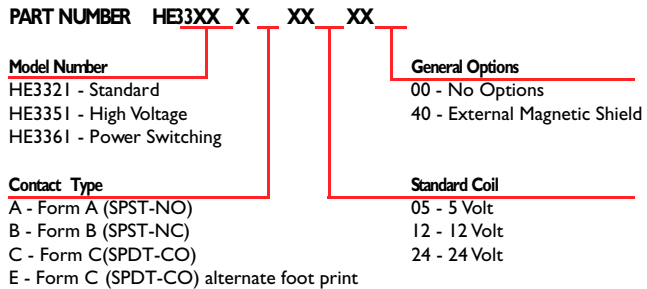
Table 1

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



EXAMPLE The HE3321A0540 is a I Form relay 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 **HE3300 Series** ■ Recognized File #E47 **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	Power, Switching	Watt - max.	10	20	50	5	10
Contact Hamlin for specific load/life details	Voltage, Switching	Vdc - max.	200	250	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	600	300	200	250
	Contacts to Coil	Vac - min.	2500	2500	2500	2500	2500
RESISTANCE	Contact, Initial	- max.	0.150	0.150	0.150	0.200	0.150
	Insulation: Across Open Contacts	- min.	10 ¹⁰	10 ¹⁰	10 ¹⁰	10 ⁹	10 ¹⁰
	Between Isolated Terminals	- 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 Miniature 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	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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