



HE200 P.C.B. Mount Features and Benefits

Features

- Multi-pole configuration (up to 5 normally open contacts)
- Combination normally open/normally closed option
- Available with 5V, 12V or 24V coil options as standard
- Magnetic shield option
- Lengthways coil option
- Staggered pins
- Fully encapsulated

Benefits

- One relay, many contacts 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.

Applications

- Security
- Telecoms
- Instrumentation
- Process Control
- Industrial

DIMENSIONS (in) mm

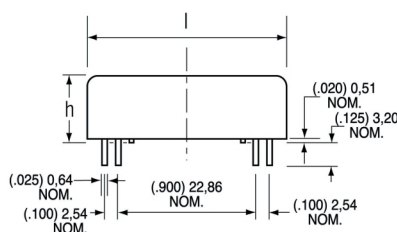


Figure 1 HE200

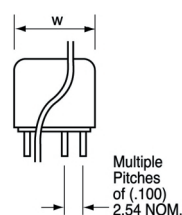
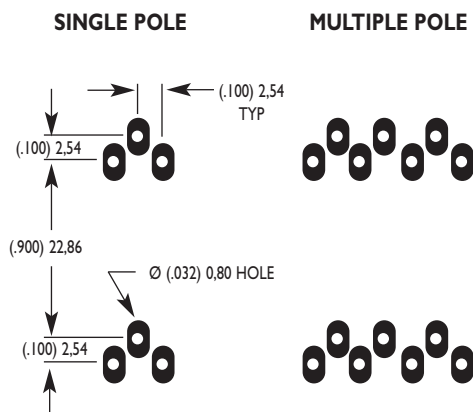


Figure 2 HE200

Table 1

Relay Type	Case Size, Max.	All h	All l	l w	2 w	3 w
HE200	Metal Case	(.375) 9,5	(1.260) 32	(.394) 10	(.493) 12,5	(.591) 15
	Plastic Case	(.394) 10	(1.280) 32,5	(.414) 10,5	(.512) 13	(.611) 15,5

HE200 PCB LAYOUT (Bottom View)



ORDERING INFORMATION

PART NUMBER	HE2X	X	X	XX	X	X
Model Number	HE22 - Standard	HE25 - High Voltage				
Number of Contacts	1,2,3,4,5 (5 form A only)					
Contact Type	A - Form A (SPST-NO)	B - Form B (SPST-NC)	C - Form C (SPDT-CO)	X - Combination Form A and B		
Coil Termination	0 - End Coil	1 - Lengthwise				
Case Option	5 - Plastic case	9 - Metal case				
Standard Coil	05 - 5 Volt	12 - 12 Volt	24 - 24 Volt			

EXAMPLE: The HE221A0550 is a 1 Form relay with a 5 Volt coil, plastic case and end coil termination.

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

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Table 2 HE200 Series			Electrical and Operating Characteristics @ 25°C.		
Column Number from Table 3			Column 1	Column 2	Column 3
Contact Type			Form A Form B Standard	Form C Standard	Form A High Voltage
Relay Types			HE200	HE200	HE200
CONTACT RATINGS Contact Hamlin for specific load/life details.	Power, Switching	Watt - max.	10	5	10
	Voltage, Switching	Vdc - max.	200	175	300
	Current, Switching	A - max.	0.5	0.25	0.5
	Current, Carry	A - max.	1.2	1.5	1.5
VOLTAGE HOLD-OFF	Across Open Contacts	Vdc - min.	250	200	450
	Contacts to Coil	Vac - min.	1500	1500	1500
	Between Isolated Terminals				
	Plastic case	Vac - min.	1500	1500	1500
RESISTANCE	Metal Case	Vac - min.	1000	1000	1000
	Contact, Initial	Ω - max.	0.150	0.150	0.150
	Insulation: Across Open Contacts	Ω - min.	10 ¹⁰	10 ⁹	10 ¹⁰
TIMING	Between Isolated Terminals	Ω - min.	10 ¹⁰	10 ¹⁰	10 ¹⁰
	Operate Time	ms - max.	1.0	3.0	1.0
	Release Time	ms - max.	1.0	3.0	1.0
ENVIRONMENTAL	Temperature, Operating	°C	-40 to +85	-40 to +85	-20 to +85
	Temperature, Storage	°C	-40 to +105	-40 to +105	-40 to +105
	Vibration Resistance	G - max.	20	20	20
		10-2000 Hz.			
	Shock Resistance	G - max.	50	50	50
		11 ms, ½ sine			

Table 3 HE200 Series Miniature Relay			Coil Characteristics @ 25°C.						
Contact Form & Type	Electrical & Operating Characteristics	Dimensions Case Size	Part Number Note 1	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	Table 1 Column 1	HE221A0550	5	140	3.5	0.28	11	
			HE221A1250	12	855	8.4	0.7	27	
			HE221A2450	24	3285	16.8	1.4	54	
			HE221A0590	5	345	3.5	0.4	18	
			HE221A1290	12	2145	8.4	1.0	46	
			HE221A2490	24	7845	16.8	2.0	88	
1B SPST-NC	See Table 2 Column 1	Table 1 Column 2	HE221B0550	5	110	3.5	0.28	See Note 3 6.5	
			HE221B1250	12	680	8.4	0.7	14.0	
			HE221B2450	24	2770	16.8	1.4	28.0	
			HE221B0590	5	180	3.5	0.4	6.5	
			HE221B1290	12	1100	8.4	1.0	14.0	
			HE221B2490	24	4240	16.8	2.0	28.0	
2A DPST-NO	See Table 2 Column 1	Table 1 Column 2	HE222A0550	5	70	3.5	0.25	9	
			HE222A1250	12	445	8.4	0.65	22	
			HE222A2450	24	1700	16.8	1.3	43	
			HE222A0590	5	180	3.5	0.4	14	
			HE222A1290	12	1100	8.4	1.0	36	
			HE222A2490	24	4240	16.8	2.0	71	
1A SPST-NO High Voltage	See Table 2 Column 3	Table 1 Column 1	HE251A0550	5	140	3.5	0.28	11	
			HE251A1250	12	855	8.4	0.7	27	
			HE251A2450	24	3285	16.8	1.4	54	
			HE251A0590	5	345	3.5	0.4	18	
			HE251A1290	12	2145	8.4	1.0	46	
			HE251A2490	24	7845	16.8	2.0	88	
1C SPDT-CO	See Table 2 Column 2	Table 1 Column 1	HE221C0550	5	140	3.5	0.28	8	
			HE221C1250	12	855	8.4	0.7	22	
			HE221C2450	24	3285	16.8	1.4	42	
			HE221C0590	5	140	3.5	0.28	8	
			HE221C1290	12	855	8.4	0.7	22	
			HE221C2490	24	3285	16.8	1.4	42	
2C DPDT-CO	See Table 2 Column 2	Table 1 Column 3	HE222C0550	5	55	3.5	0.3	8	
			HE222C1250	12	370	8.4	0.75	22	
			HE222C2450	24	1350	16.8	1.5	42	
			HE222C0590	5	55	3.5	0.3	8	
			HE222C1290	12	370	8.4	0.75	22	
			HE222C2490	24	1350	16.8	1.3	42	

- Notes: 1) Part number's last two digits denote case materials:
50 is plastic, 90 is metal.
2) The relays shown on the right are available on a build to order basis. Contact Hamlin for details.
3) HE221B - Exceeding recommended voltage may cause contact reclosure.
4) Special requirements such as side coil termination, coil resistance and contact configuration are available. Contact Hamlin for details.

Type	1A	2A	3A	4A	5A	1B	1A+1B	2A+2B	4C
HE22	+	+	+	+	+	+	+	+	+
HE25	+	+	+	+	+	+	+	+	-

1A+1B and 2A+2B are also known as 2X and 4X

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