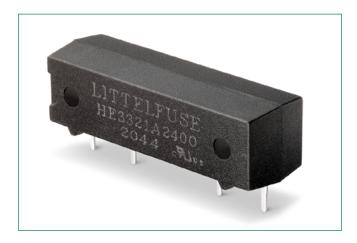
# Miniture Single In-line Reed Relay





# **Agency Approvals**

Agency	Agency File Number
c <b>FL</b> °us	E47258

Note: Not all parts are UL Recognized. Contact Littelfuse for specific parts and agency approval ratings.

# **Description**

The HE3300 is a miniature reed relay in a SIL package with a choice of normally open, normally open high voltage or changeover contacts capable of switching up to 300Vdc at 10W. It is available with 5V, 12V, and 24V coils and has external magnetic shield options.

## **Features & Benefits**

- Single in-line configuration allows high packing densities, minimizing space and cost
- Lower power coil consumption than competing electromechanical devices
- Hermetically sealed switching contact is immune to its environment
- Transfer molded package gives maximum component protection
- Miniature single in-line package

- High voltage switching version
- Normally open and change over contact configurations available
- External magnetic shield option
- RoHS Compliant
- UL Recognized to UL 508 as an Industrial Control Switch

## **Applications**

- Security Systems
- Telecom Equipments
- Process Control Systems
- Automatic Test Equipments
- Instrumentation

#### **Dimensions**

Dimensions in mm (inch)

Relay Type	Body Type	L	w	н
HE3300	Transfer Molded	24.13 (.950)	7.00 (.276)	7.40 (.291)
	External Shield	24.90 (.980)	7.60 (.299)	7.80 (.307)

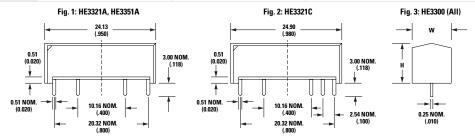




Table 2 **Electrical and Operating Characteristics @ 25°C** 

		Contact Type					
Characteristics			Form A SPST-NO Standard	Form A SPST-NO High Voltage	Form C SPST-CO Standard		
				Relay Types			
			HE3321A	HE3351A	HE3321C		
	Power, Switching	Watt - max.	10	10	5		
Contact Rating <sup>1</sup>	Voltage, Switching <sup>2</sup>	Vdc - max. Vac - max.	200 140	300 265	175 120		
	Current, Switching <sup>3</sup>	Adc - max. Aac - max.	0.5 0.35	0.5 0.35	0.25 0.18		
	Current, Carry	Adc - max.	1.2	1.5	1.5		
Voltage Hold-off <sup>4</sup>	Across Open Contacts Contacts to Coil	Vdc - min. Vac - min.	250 2500	450 2500	200 2500		
Resistance	Contact, Initial Insulation Across Open Contacts Insulation Between Isolated Terminals	$\Omega$ max. $\Omega$ min. $\Omega$ min.	0.150 10 <sup>10</sup> 10 <sup>10</sup>	0.150 10 <sup>10</sup> 10 <sup>10</sup>	0.200 10 <sup>10</sup> 10 <sup>10</sup>		
Timing	Operate Time Release Time	ms - max.	1.0 1.0	1.0 1.0	3.0 3.0		
Environmental	Temperature, Operating Temperature, Storage <sup>5</sup> 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		

#### Notes:

- 1. Contact rating Product of the switching voltage and current should never exceed the wattage rating. Contact Littelfuse for additional load/lofe information.

  2. When switching inductive and/or capacitive loads, the effects of transient voltages and/or currents should be considered. Refer to Application Notes AN108A & AN107 for details.

  3. Electrical Load Life Expectancy Contact Littelfuse with voltage current values along with type of load.
- 4. Breakdown Voltage Per MIL-STD-202, Method 301.
- 5. Storage Temperature Long time exposure at elevated temperature may degrade solderability of the leads.

Table 3 Coil Characteristics @ 25°C

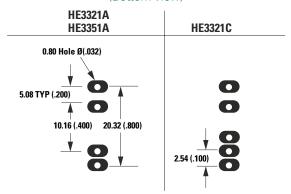
Contact Form & Type	Electrical & Operating Characteristics	Dimensions	Part Number	Nominal Coil Voltage Vdc	Coil Resistance ±10% Ohms	Must Operate Vdc	Must Release Vdc	Maximum Coil Voltage Vdc	Top View 2.54mm (0.1") Grid Dot on Case: Pin 1 Numbers not printed on case.
1A SPST-NO	See Table 2 Column 1	See Figure 1	HE3321A0400 HE3321A1200 HE3321A2400	5 12 24	500 500 2000	3.75 9.0 18.0	0.5 1.0 2.0	22 22 44	
1C SPDT-CO	See Table 2 Column 3	See Figure 2	HE3321C0500 HE3321C1200 HE3321C2400	5 12 24	125 500 2000	3.75 9.0 18.0	0.5 1.0 2.0	11 22 44	
1A SPST-NO High Voltage	See Table 2 Column 2	See Figure 1	HE3351A0500 HE3351A1200 HE3351A2400	5 12 24	125 500 2000	3.75 9.0 18.0	0.5 1.0 2.0	11 22 44	



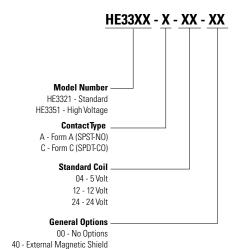
# **H3300**Miniture Single In-line Reed Relay

### **HE3300 PCB Layout**

(Bottom View)



## **Part Numbering System**



Note: Not all combinations of Part Number suffixes are available. Contact Littelfuse for details.

## **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A

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