



# HALF SIZE CRYSTAL CAN RELAY 5 AMPERE DPDT

Series  
HA

## Product Description

A proven variation of our standard half size crystal can relay incorporates improved current carrying paths to provide 5 ampere switching.

The design is supported by our standard qualified military relays and their continued testing programs, together with the latest metallurgical innovations in contact materials and current carrying members. Reliability, product consistency and low cost are maintained through our volume production techniques.

The following construction features ensure the highest reliability in extreme environments:

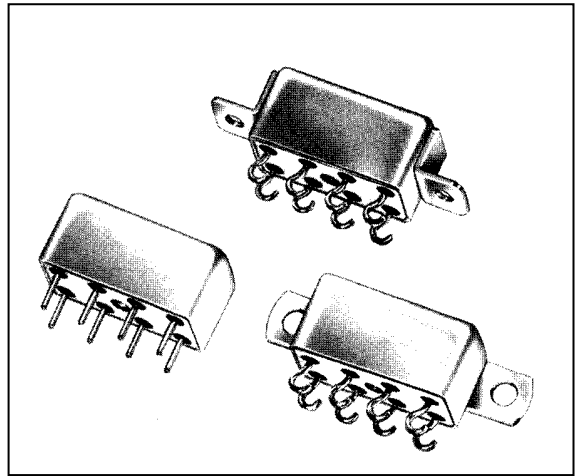
- All welded relay construction
- Cleaning and sealing techniques ensures maximum internal cleanliness
- 5 amperes switching
- 2 form C, DPDT contacts, special metal alloy with gold plating
- Frame, armature designs and force / mass ratio provides exceptional immunity to shock and vibration.

## Series Type

- 2HA 2 form C, DPDT

## Environmental and Physical Specifications

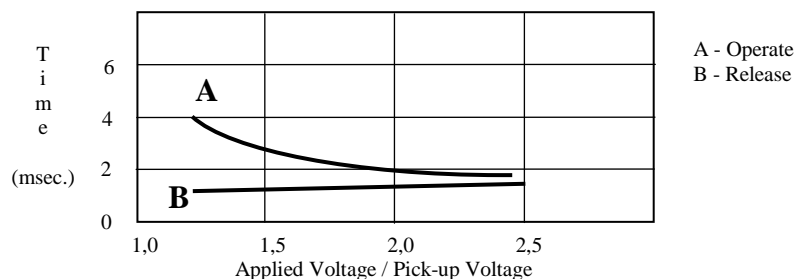
Temperature (Ambient)	- 65°C to + 125°C
Shock	100 g, 6 ms.
Vibration (sinusoidal)	20 g, 10 to 2000 Hz
Acceleration	30 g
Sealing	All welded, Hermetic
Weight	0,35 oz. (10,0 grams) max.



## Electrical Characteristics (over the Temperature range. Unless otherwise noted)

Coil Data	See Typical Characteristics chart		
Contact Rating	Type Load	Contact Load	Cycles min.
(Note: All ratings with grounded case)	Resistive	5 A / 28 Vdc	100.000
		1 A / 115Vac, 400 Hz	100.000
	Overload	0,3 A / 115 Vac, 60 Hz	100.000
	Inductive	10 A / 28 Vdc	100
		0,75 A / 28 Vdc (200 mH)	100.000
Contact Resistance	0,05 Ω max. initial		
Operate Time	6,0 ms. max. at 25°C		
Release Time	4,0 ms. max. at 25°C		
Contact Bounce	3,0 ms. max. at 25°C		
Dielectric Strength	1.000 Vrms min., 60 Hz, all points, 500 Vrms min. between open contacts and coil to case, at sea level		
Insulation Resistance	1.000 MΩ min. all points at 500 Vdc		
Intercontact Capacitance	2,5 pF between contacts		
Sensitivity	300 mW at pick-up, 1,4 W at nominal rated coil voltage, at 25 °C		

Figure 1 - Operate & Release Time curves vs. Applied Voltage



Note:  
Typical characteristics are based on factory knowledge. Test to ensure compliance, are not performed.



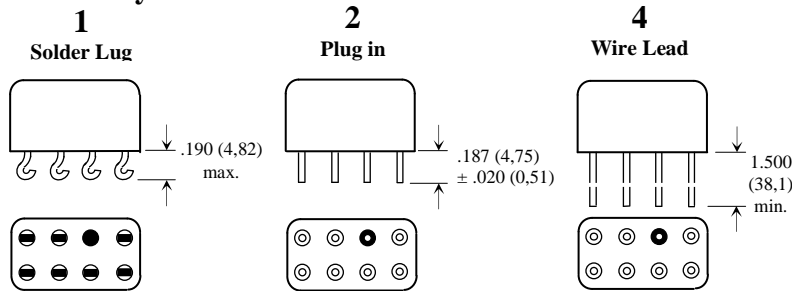
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## Typical Characteristics

Voltage Code	Coil Voltage		Coil Resistance ± 10% at 25°C	Pick-up Vdc Max. at 25°C	Drop-out Vdc Min. at 25°C
	Nominal	Max.			
105	5,0	6,0	18	3,6	0,25
106	6,0	7,2	40	3,6	0,35
112	12,0	14,4	150	7,3	0,70
124	24,0	29,0	400	17,0	1,2
126	26,5	32,0	600	16,0	1,5
136	36,0	43,0	900	26,0	2,2
148	48,0	57,0	1600	34,0	2,8

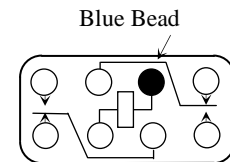
## Terminal Styles



Note:

- Dimensions are shown in inches (millimetres)
- Terminal spacing is .200 (5,08). Terminal diameter is .030 (0,76) + .003 (0,08) - .002 (0,05)

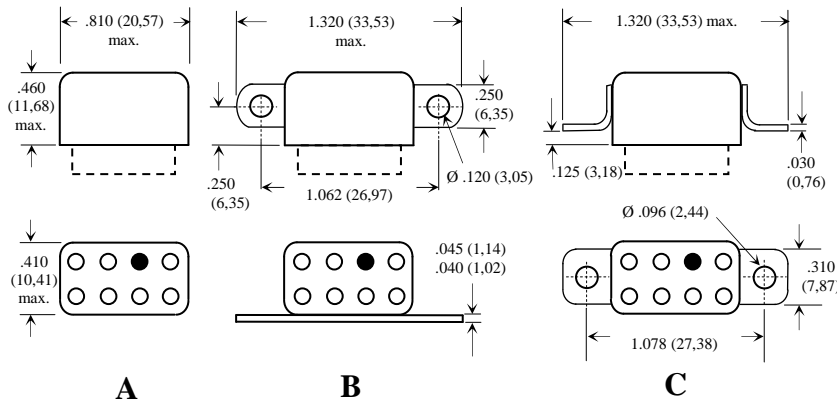
## Schematic Diagram



Note:

- Schematics are viewed from terminals

## Mounting Styles

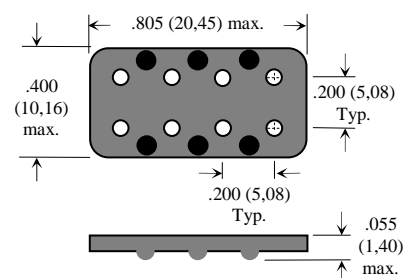


Note:

- Dimensions are shown in inches (millimetres)

## Insulating Pad

Relays can be supplied with an insulating pad epoxied to the relay header, to prevent the possible shorting of printed circuit board land lines and to facilitate circuit board cleaning. To order relay with pad add. "P" to Part Number. Example: **2HA-2A-126 P**



Note:

- Dimensions are shown in inches (millimetres)

## How to Order (Part Numbering System)

Series	<b>2HA</b>	-	<b>2</b>	A	-	<b>126</b>	P	Insulating Pad (optional)
Terminal Style								
Mounting Style								Voltage Code