



HALF SIZE CRYSTAL CAN RELAY 2 AMPERE DPDT AC COIL

Series
AK

Product Description

This standard half size crystal can relay series, offer switching capability of low level signal up to 2 amperes under the most extreme environmental conditions.

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

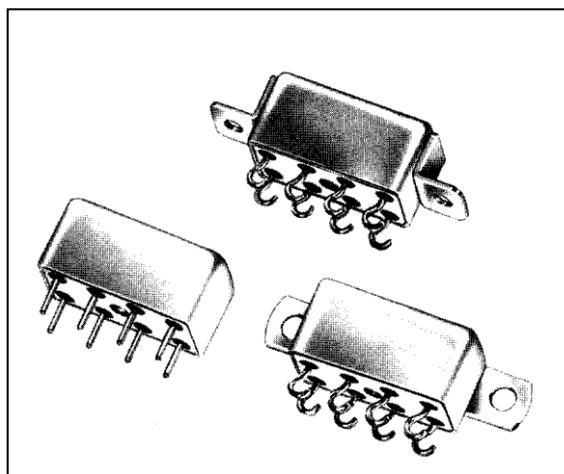
- All welded relay construction
- Cleaning and sealing techniques ensures maximum internal cleanliness
- Low level to 2 amperes switching
- 2 form C, DPDT contacts, special metal alloy with gold plating
- Frame, armature designs and force / mass ratio provides exceptional immunity to shock and vibration
- AC Coil 400 Hz.

Series Type

- **AK** 2 form C, DPDT with internal bridge diode, for AC operation

Environmental and Physical Specifications

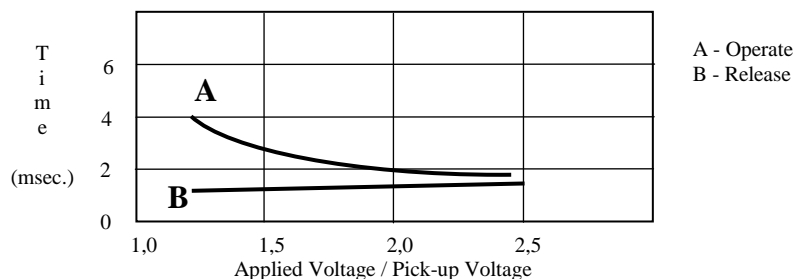
Temperature (Ambient)	- 65°C to + 125°C
Shock	100 g, 6 ms.
Vibration (sinusoidal)	20 g, 10 to 2000 Hz
Acceleration	50 g
Sealing	All welded, Hermetic
Weight	0,53 oz. (15,0 grams) max.



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)	Low Level	10 mA / 30 mV	1.000.000
	Resistive	2 A / 28 Vdc	100.000
		1 A / 115Vac, 400 Hz	100.000
		0,3 A / 115 Vac, 60 Hz	100.000
	Overload	4 A / 28 Vdc	100
	Inductive	0,75 A / 28 Vdc (200 mH)	100.000
Contact Resistance	0,05 Ω max. initial		
Operate Time	4,0 ms. max. at 25°C		
Release Time	3,0 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 M Ω min. all points at 500 Vdc		
Intercontact Capacitance	2,5 pF between contacts		
Sensitivity	250 mW at pick-up, 660 mW typical 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.



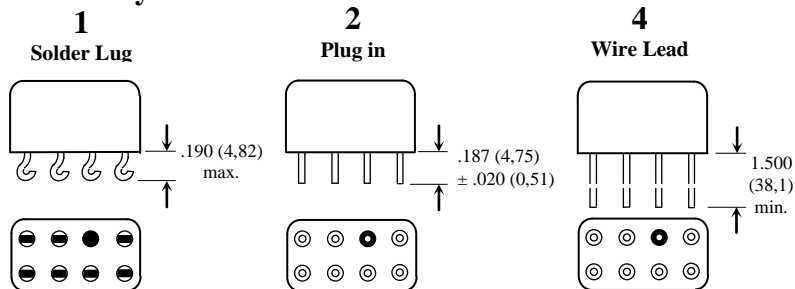
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Typical Characteristics

Voltage Code	Coil Voltage		Coil Resistance ± 10% at 25°C	Pick-up Vac 400Hz Max. at 25°C	Drop-out Vac 400Hz Min. at 25°C
	Nominal	Max.			
106	6,0	7,2	47	4,5	0,25
109	9,0	10,8	100	6,0	0,35
110	10,0	13,0	218	6,5	0,45
112	12,0	14,4	218	9,5	0,65
126	26,5	32,0	1500	18,5	1,0

Terminal Styles

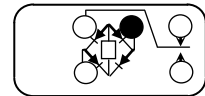


Note:

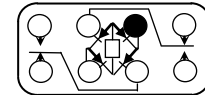
- Dimensions are shown in inches (millimetres)
- Terminal spacing is .200 (5,08). Terminal diameter is .030 (0,76) + .003 (0,08) - .002 (0,05)

Schematic Diagram

1AK



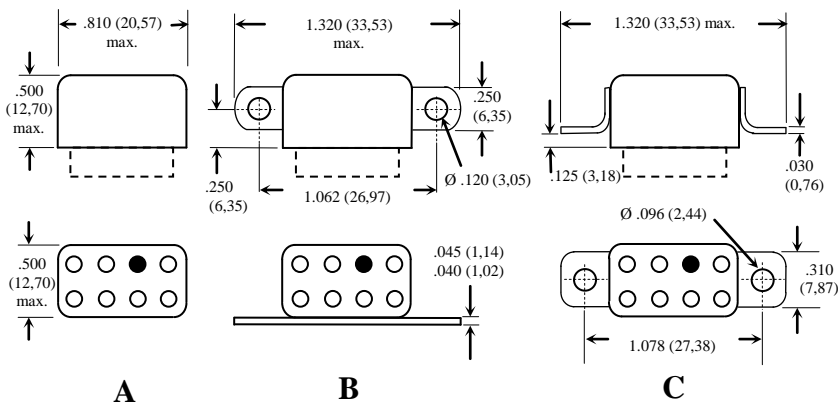
2AK



Note:

- Schematics are viewed from terminals

Mounting Styles

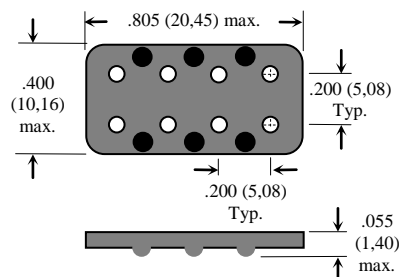


Note:

- Dimensions are shown in inches (millimetres)

Insulating Pad

Relays can be supplied with a 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: **2AK-2A-126 P**



Note:

- Dimensions are shown in inches (millimetres)

How to Order (Part Numbering System)

Series	2AK	- 2	A	- 126	P	
Terminal Style						Insulating Pad (optional)
Mounting Style						Voltage Code