



2 AMPERE — 1/2 CRYSTAL CAN RELAY COIL TRANSIENT SUPPRESSED

2K-7940

Product Description

A series of half crystal can hermetically sealed relays manufactured in compliance to the referenced Military specification. Non polarized, non latching hermetically sealed relay with bifilar coil. The product's advanced design provides superior performance in the environmental and operational requirements of today's sophisticated equipment. Volume production coupled ensure product consistency and the highest degree of reliability.

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

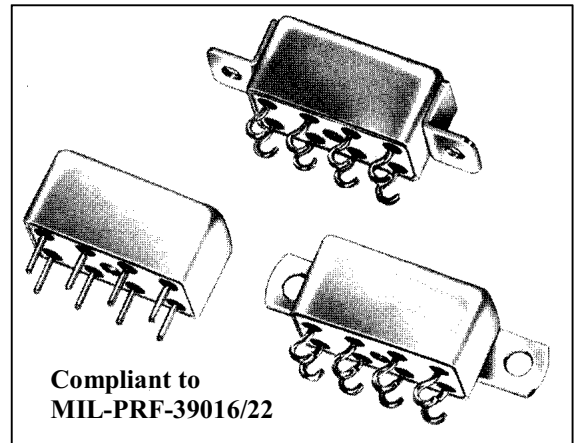
- All welded relay construction
- Cleaning and sealing techniques ensures maximum internal cleanliness
- Low level to 2 amperes switching
- 2 form C, DPDT contacts, special metal alloy with gold plating
- Frame, armature design and force / mass ratio provides exceptional immunity to shock and vibration.

Series Type

- **2K-7940** 2 form C, DPDT

Environmental and Physical Specifications

Temperature (Ambient)	- 65°C to + 125°C
Shock	100 g, 6 msec.
Vibration (sinusoidal)	30 g, 10 to 3000 Hz
Vibration (random)	0,4g / Hz, 50 to 2000 Hz
Acceleration	50 g
Sealing	All welded, Hermetic
Weight	0,46 oz. (13,0 grams) max.



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

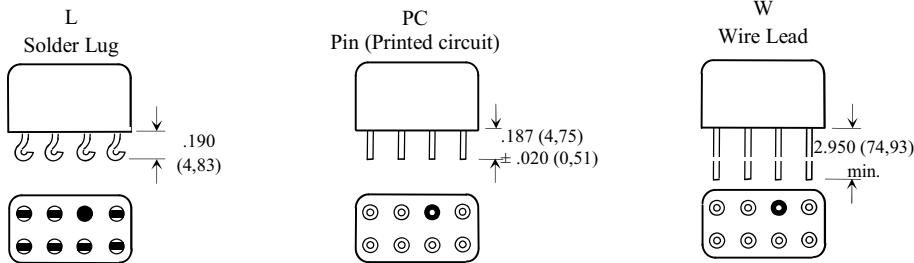
Coil Data	See Typical Characteristics chart		
Contact Rating	Type Load	Contact Load	Cycles min.
(Note: All ratings with grounded case)	Low Level Resistive	10 to 50 μ A / 10 to 50 mV dc or peak ac 2 A / 28 Vdc 0,1 A / 115 Vac, 60 & 400 Hz	1.000.000 100.000 100.000
	Overload Inductive Lamp	4 A / 28 Vdc 0,5 A / 28 Vdc (200 mH) 0,16 A / 28 Vdc	100 100.000 100.000
Contact Resistance	0,05 Ω max. initial, 0,1 Ω max. after life, 0,15 ohm max. after low level		
Operate Time	5,0 ms max.		
Release Time	5,0 ms max.		
Contact Bounce	2,0 ms max.		
Contact Stabilization Time	2,5 ms max.		
Dielectric Strength	1.000 Vrms min., 60 Hz, all points, 500 Vrms min. between open contacts and coil to case, at sea level 350 Vrms min., 60 Hz, all points at 70,000 ft.		
Insulation Resistance	1.000 M Ω min. all points at 500 Vdc		
Intercontact Capacitance	2,5 pF between contacts		
Sensitivity	250 mW at pull-in, 1 W at nominal rated coil voltage, at 25°C		



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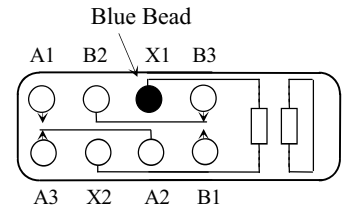
2K-7940

Terminal Style



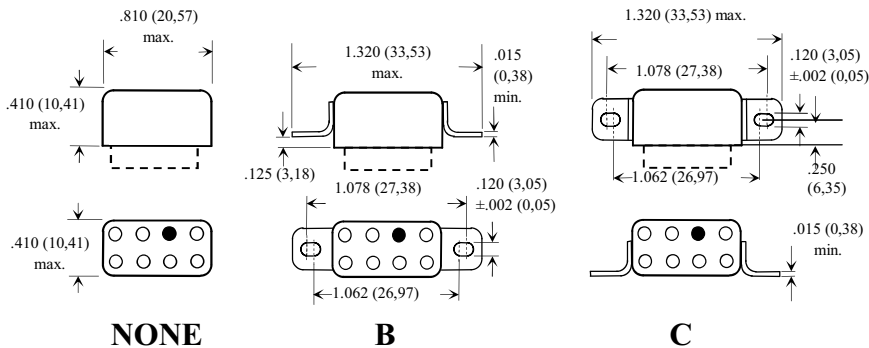
Note:
Dimensions are shown in inches (millimetres)
Terminal Spacing is .200 (5,08)
Terminal diameter is .030 (0,76) + .003 (0,07) - .002 (0,05)

Schematic Diagram



Note:
Schematics are viewed from terminals

Mounting Style



Note:
Dimensions are shown in inches (millimetres)
Terminal Spacing is .200 (5,08)
Terminal diameter is .030 (0,76) + .003 (0,07) - .002 (0,05)

Note:

Failure rate reliability level

Military Suffix	Hi-G Suffix	FR % / 10000 cycles
L	A	3,0
M	B	1,0

Typical Characteristics at 25°C

Terminals			Mount	Coil Voltage Vdc		DC Coil Resistance ±10% @ 25°C	Operate Characteristics - Over the Temperature Range		
Solder Lug	Plug-in	Wire Lead		Max.	Nom.		Pick Up Vdc Max.	Dropout Vdc Min.	Max. Coil Transient Voltage
004	005	006	B	32,0	26,5	700	20,0	1,0	48,0
007	-	008	C						
-	009	010	NONE						
011	012	013	B	15,0	12,0	160	9,6	0,5	24,0
014	-	015	C						
-	016	017	NONE						

How to Order (Part Numbering System)

Series	2K-7940	- 004	A	Reliability levels A or B
Dash number (see characteristics table)				