



GENERAL INFORMATION SELECTOR CHART

Series	Series Types	Enclosure	Contacts		Nominal Coil Voltage or Current	Operating Power at P.I. (mW)	Applicable Specification Approvals			
			Arrangement	Rating			MILITARY		CECC	
							Mil-PRF-39016/	Mil-PRF-28776/	16101-	16207-
MA	MA	TO-5	DPDT	1A / 28 Vdc	5...30,0 Vdc	130	9			
	MA-D				5...26,5 Vdc		15			
	MA-DD						20			
	MA-T							1		
MA2		TO-5	DPDT	1A / 28 Vdc	5...30,0 Vdc	130			003	
MCA		TO-5	DPDT	2A / 28 Vdc	5...26,5 Vdc	150				
MS	MS	TO-5	DPDT	1A / 28 Vdc	5...48,0 Vdc	60	11			
	MS-D						16			
	MS-DD						21			
	MS-T							3		
MS2		TO-5	DPDT	1A / 28 Vdc	5...48,0 Vdc	60			004	
1MA	1MA	TO-5	SPDT	1A / 28 Vdc	5...26,5 Vdc	100	7			
	1MA-D						23			
	1MA-DD						24			
	1MA-T							5		
1MA1		TO-5	SPDT	1A / 28 Vdc	5...26,5 Vdc	100			005	
1MS	1MS	TO-5	SPDT	1A / 28 Vdc	5...40,0 Vdc	50	10			
	1MS-D						25			
	1MS-DD						40			
	1MS-T						50		4	
1MS1		TO-5	SPDT	1A / 28 Vdc	5...40,0 Vdc	50			006	
	MGA	CUBIC .100GRID	DPDT	1A / 28 Vdc	5...26,5 Vdc	130	17			
	MGA-D						18			
MGA-DD	150									
MGAE	MGAE	CUBIC .100GRID	DPDT	1A / 28 Vdc	5...28,0 Vdc	130				801
	MGAE-D									
	MGAE-DD						150			
MGA2	MGA2/D2	CUBIC	DPDT	1A / 28 Vdc	5...28,0 Vdc	140			007	
MGS	MGS	CUBIC .100GRID	DPDT	1A / 28 Vdc	5...48,0 Vdc	60	41			
	MGS-D						42			
	MGS-DD						43			
MGSE	MGSE	CUBIC .100GRID	DPDT	1A / 28 Vdc	5...48,0 Vdc	60				802
	MGSE-D									
	MGSE-DD									
MGS2	MGS2/D2	CUBIC	DPDT	1A / 28 Vdc	5...48,0 Vdc	60			008	
12K		1/2 CC	DPDT	2A / 28 Vdc	5...26,5 Vdc	250	6			
2K		1/2 CC	DPDT	2A / 28 Vdc	5...48,0 Vdc	250				
2K6600		1/2 CC	DPDT	2A / 28 Vdc	5...48,0 Vdc	250			007.014.021	
							MILITARY Compliance			
							Mil-R-39016/	Mil-R-5757/		
2K7940		1/2 CC	DPDT	2A / 28 Vdc	6...26,5 Vdc	250	22			
KA	2KA	1/2 CC	DPDT	2A / 28 Vdc	5...48,0 Vdc	100				
HA	2HA	1/2 CC	DPDT	5A / 28 Vdc	5...48,0 Vdc	300				
B	2B	CC	DPDT	2A / 28 Vdc	6...76,0 Vdc	250				
	2BR		DPDT	26,5...115 Vac	370					
2B6660		CC	DPDT	3A / 28 Vdc	6...76,0 Vdc	250			008	
2B7506		CC	DPDT	2A / 28 Vdc	6...26,5 Vdc	250		10		
	BS		DPDT	2A / 28 Vdc	6...26,5 Vdc	100				
BS	2BSA	CC	SPDT	2A / 28 Vdc	3,2...70,6mA	25				
	1BSK				4,0...89,2mA	40				
	2BSK				DPDT	5A / 28 Vdc	6...76,0 Vdc	280		
BN	1BN	CC	SPDT	5A / 28 Vdc	6...76,0 Vdc	280				
	2BN		DPDT							
2BC7201		CC	DPDT	2A / 28 Vdc	4,0...90,0mA	40		13		
BCN	1BCN	CC	SPDT	5A / 28 Vdc	6...40,0 Vdc	80				
	2BCN		DPDT							
4B			4PDT	2A / 28 Vdc	6...115 Vdc	400				
T	2T	CC	DPDT	10A / 28 Vdc	6...115 Vdc	500				
	2TR				115 Vac					
TN	2TN	CC	DPDT	15A / 28 Vdc	6...115 Vdc	500				
	2TNR				115 Vac					
2T7188		CC	DPDT	10A / 28 Vdc	6...120 Vdc	500		23		
RFK	RFK	1/2 CC	SPDT	2A / 28 Vdc	6...26,5 Vdc	250				
	2RFK		DPDT							
RFB	RFB	CC	SPDT	2A / 28 Vdc	6...76,5 Vdc	250				
	2RFB		DPDT							
RFBC	RFBC	CC	SPDT	2A / 28 Vdc	4,0...89,2 mA	40				
	2RFBC		DPDT							
4MA		CC	4PDT	1A / 28 Vdc	5,0...30,0 Vdc	260				
4MS		CC	4PDT	1A / 28 Vdc	5,0...48,0 Vdc	120				



HALF SIZE CRYSTAL CAN RELAY 2 AMPERE DPDT

coil transient Suppressed

Series
2K-7940

Product Description

A complete series of half crystal can hermetically sealed relays manufactured in compliance to the referenced Military specification.

The leading relay design in military and commercial application is represented in Nuova Hi-G Italia 2K-7940 series relay. The product advanced design provides superior performance in the environmental and operational requirements of today's sophisticated equipment.

This series type provide a coil transient suppression by a second coil in short-circuit.

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

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

Series Type

- **2K-7490** 2form C, DPDT

Environmental and Physical Specifications

Temperature (Ambient)	-65°C to + 125°C
Shock	100 g's, 6 msec.
Vibration (sinusoidal)	30 g's, 10 to 3000 Hz
Vibration (random)	0,4g ² / Hz, 50 to 2000 Hz
Acceleration	50g's
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 Charateristics chart		
Contact Rating (Note: All ratings with grounded case)	Type load	Contact load	Cycles min.
	Low level	10 to 50 µA/10 to 50 mV dc or peak ac	1.000.000
	Resistive	2 Amp / 28 Vdc	100.000
		0,1 Amp / 115 Vac, 60 and 400 HZ	100.000
	Overload	4 Amp / 28 Vdc	100
Inductive	0,50 Amp / 28 Vdc (200 mH)	100.000	
Lamp	0,16 Amp / 28 Vdc	100.000	
Contact Resistance	0,05 ohm max. initial, 0,1 ohm max. after life high level, 0,15 ohm max. after low level		
Operate Time	5,0 msec. max.		
Release Time	5,0 msec. max.		
Contact Bounce	2,0 msec. max.		
Contact stabilisation time	2,5 msec. max.		
Dielectrict Strength	1000 Vrms min., 60 Hz, all point, 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	10000 megohms min. all points at 500 Vdc		
Intercontact Capacitance	2,5 pF Between contact		
Sensitivity	1,0 watt max. at nominal rated coil voltage, at 25°C		



HALF SIZE CRYSTAL CAN RELAY

2 AMPERE DPDT

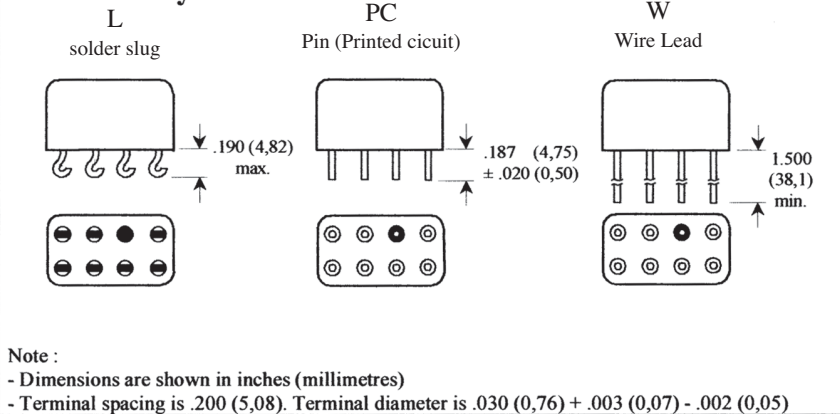
coil transient Suppressed

Series
2K-7940

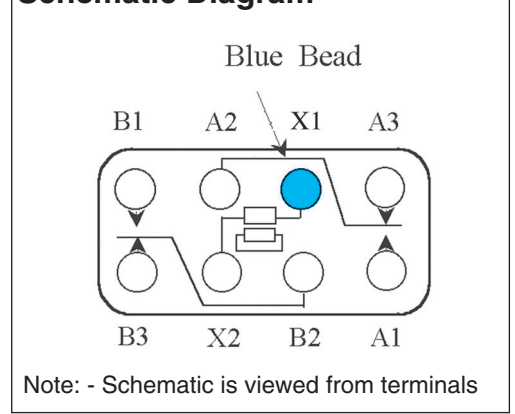
Typical Characteristics (over temperature range, unless otherwise noted)

Terminal Codes			Mounting Styles	Coil Voltage (Vdc)		DC coil Resistance ±10% at 25°C	Pick-up (Vdc) Max	Drop-out (Vdc)		Max. Coil Transient Voltage
Solder Lug (L)	Pin (PC)	Wire Lead (W)		Max.	Nom.			Max.	Min.	
004 007	005 008 009 010	006 008 010	B C None	32,0	26,5	700	20,0	14,0	1,00	48,0
011 014	012 015 016 017	013 015 017	B C None	15,0	12,0	160	9,6	5,8	0,50	24,0
018 021	019 022 023 024	020 022 024	B C None	7,5	6,0	40	4,8	2,9	0,25	12,0

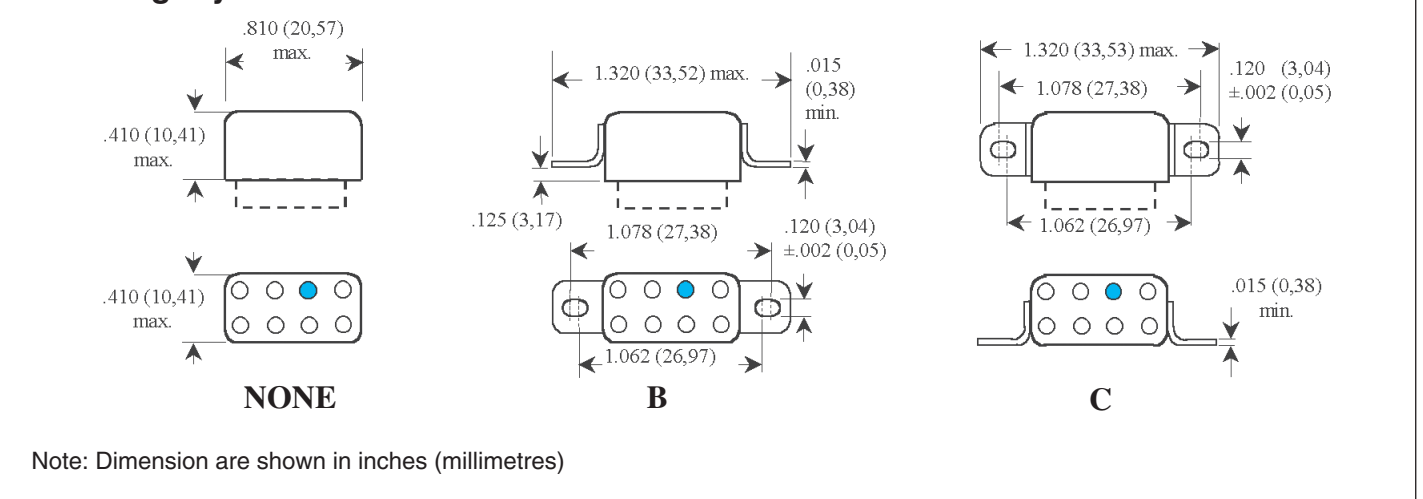
Terminal Styles



Schematic Diagram



Mounting Styles



Note:
1 Add the applicable suffix for failure Rate designation :
Example: **2K - 7940 - 004A**
NB. Not listed on USA QPL
2 Failure Rate (Reliability Level)

Military Suffix	N-HiG Suffix	FR % / 10.000 Cycles
L	A	3,0
M	B	1,0

How to Order (note 1) (Part Numbering System)

2K-7940 -004 A

Series: _____
Dash number (see characteristics table): _____
Reliability levels A or B (note2): _____

Note: Relays compliant to MIL-R-39016/22 are designated 2K-7940 and Applicable dash numbers coincide with N Hi-G Italia dash numbers