

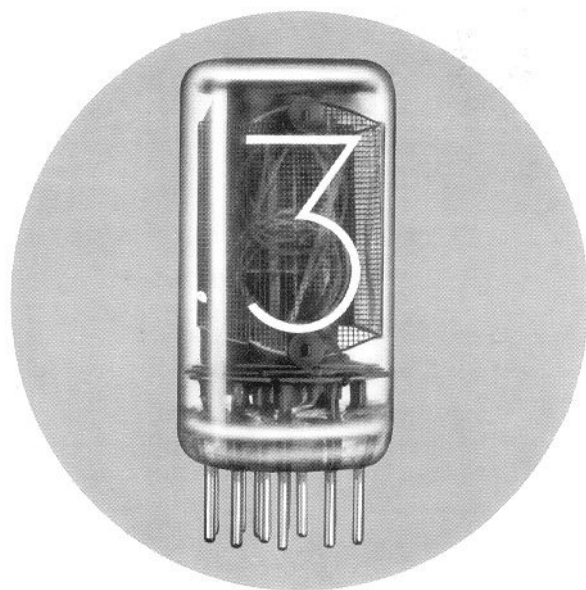
NL-900, NL-901, NL-902, NL-903, NL-904, NL-905, NL-906, NL-907, & NL-908 NUMERICAL READOUT TUBES

National Electronics tipless sideviewing Readout Tubes are long life, neon glow, numerical display tubes. The sideview configuration, small height and light weight allow flexible imaginative packaging. The short seated height (1.375 Max.) and small envelope diameter (.750 Max.) allow optimum use of panel space to provide an attractive display.

NL-900 is the **NL-840** with tip eliminated, giving a shorter seated height and is interchangeable with the **NL-840**.

Type Numbers and Characters

Type Number		Characters
Upright	Inverted	
NL-900	NL-904	(0-9)
NL-901	NL-905	(0-9), LH Dec.
NL-902	NL-906	(0-9), RH Dec.
NL-903	NL-903	+ and -
NL-908	NL-907	(0-9), L & RH Dec.



TECHNICAL INFORMATION

Ionization Voltage (Maximum)	170 Vdc
Supply Voltage (Minimum)	170 Vdc
Cathode Current	
Peak (Maximum)	3.5 mA
Average (Maximum)	3.0 mA
Average (Minimum)	1.5 mA
Decimal Point Current	
Average (Maximum)	0.5 mA
Average (Minimum)	0.2 mA
Prebias Limits	50V to 120V dc
Temperature Limits	-20°C to +55°C
(Reduced Life)	-65°C to +85°C
Life (Dynamic)	200,000 Hours
Weight	0.3 oz.
Mounting Position	Vertical with pins 1 & 10 in front

Recommended Operating Conditions:

NL-900 - NL-903 - NL-904

Supply Voltage (Ebb)	170V	250V	300V
Anode Resistor (RA)	8.2K	43K	62K

NL-901 - NL-902 - NL-905 —

(a) When the decimal point is to be operated only while another character is on:

Supply Voltage (Ebb)	170V	250V	300V
Anode Resistor (RA)	8.2K	35K	52K

(b) When the decimal point is to be operated with or without another character it is recommended individual cathode resistors be used with no resistor in the anode circuit.

Supply Voltage (Ebb)	170V	250V	300V
Numerical Resistor (RN)	10K	43K	62K
Decimal Point Resistor (RD)	72K	330K	500K

Note: Use of the highest voltage available with the appropriate resistor is recommended.

Printed in U.S.A. 5/68

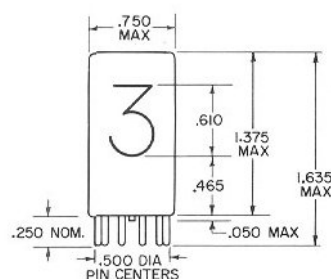
NATIONAL ELECTRONICS, INC.

a varian subsidiary

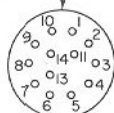
GENEVA, ILLINOIS, 60134

TELEPHONE 312 232-4300
TWX 910 237-1685

NL-900, NL-901, NL-902, NL-903, NL-904, NL-905, NL-906, NL-907, & NL-908 NUMERICAL READOUT TUBES



NORMAL VIEWING



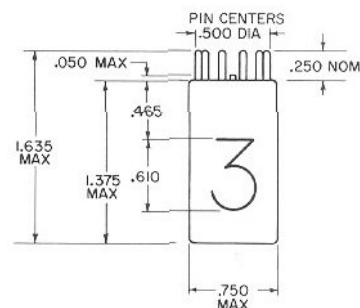
NL-900

Pin Connections

Pin Number	NL-900 NL-904	NL-901 NL-902 NL-905 NL-906	NL-903	NL-907 NL-908
1	7	7	7	7
2	5	5	5	5
3	8	8	8	8
4	Anode	Anode	Anode	Anode
5	1	1	1	1
6	4	4	+	4
7	2	2	-	2
8	6	6		6
9	9	9		9
10	3	3		3
11	Int. Conn.	Decimal Pt.	No Conn.	L. Dec. Pt.
12	No Pin	No Pin	No Pin	R. Dec. Pt.
13	0	0	Int. Conn.	0
14	Int. Conn.	Int. Conn.	Int. Conn.	Int. Conn.



NORMAL VIEWING

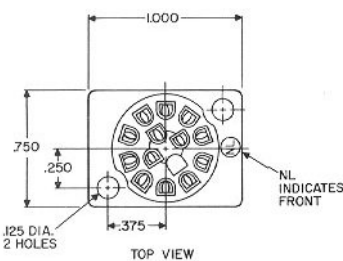


NL-904

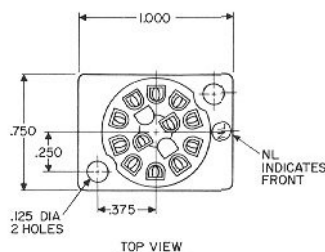


TOP VIEW

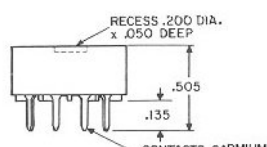
BUTTON
OR RECESS
INDICATES
FRONT



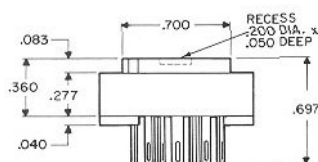
TOP VIEW



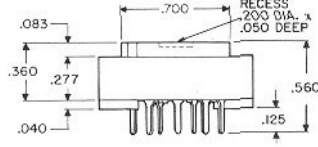
TOP VIEW



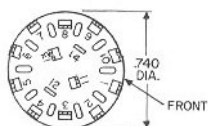
SIDE VIEW



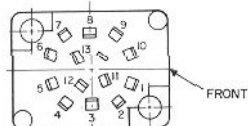
SIDE VIEW



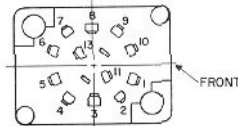
SIDE VIEW



BOTTOM VIEW

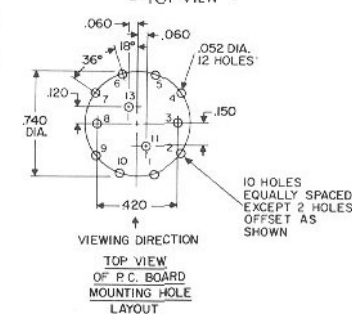


BOTTOM VIEW



BOTTOM VIEW

PRINTED CIRCUIT MOUNTING HOLE LAYOUT - TOP VIEW -



RTS-14

RTS-16 (MIL SPEC Material)
RTS-17 (Commercial Grade)

RTS-19 (MIL SPEC Material)
RTS-20 (Commercial Grade)

NATIONAL ELECTRONICS, INC.

a varian subsidiary

GENEVA, ILLINOIS, 60134

TELEPHONE 312 232-4300
TWX 910 237-1685