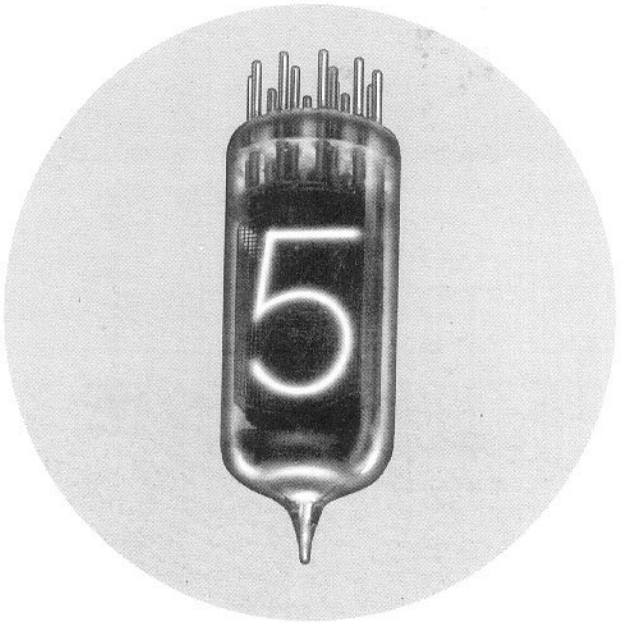
NL-874, NL-875, NL-876, NL-877 & NL-884 NUMERICAL READOUT TUBES

National Electronics Readout tubes **NL-874, NL-875, NL-876,** and **NL-884** are long-life, sideviewing, neon glow, numerical display tubes with inverted characters. The side view configuration, small height and light weight allow flexible imaginative packaging. A maximum envelope width of .750″ allows less than .800″ center to center spacing and the inverted construction allows location of circuitry near top of cabinet to make optimum use of panel spacing, providing an attractive display.



NL-874 is a 10 character display tube, numerals **0 to 9.**

NL-875 is a 10 character display tube, numerals **0 to 9** with an independent decimal point to left of the numerals.

NL-876 is a 10 character display tube, numerals **0 to 9** with an independent decimal point to the right of the numerals.

NL-877 is a 10 character display tube, numerals **0 to 9** with independent decimal points to the left and right of the numerals. **Write for technical data.**

NL-884 is a 2 character display tube, symbols + and —.

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 (Base up) with pins 1 & 10 in front

Recommended Operating Conditions:

NL-874 - NL-884

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

NL-875 - NL-876

(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
Numeral 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.

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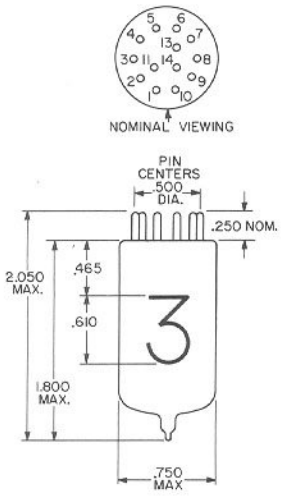
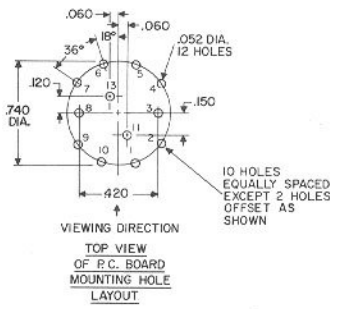


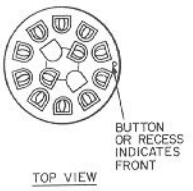
Pin Connections

Pin Number	NL-874	NL-875 NL-876	NL-884
1	7	7	
2	5	5	
3	8	8	
4	Anode	Anode	Anode
5	1	1	
6	4	4	+
7	2	2	-
8	6	6	
9	9	9	
10	3	3	
11	Int. Conn.	Decimal Pt.	No Conn.
12	No Pin	No Pin	No Pin
13	0	0	Int. Conn.
14	Int. Conn.	Int. Conn.	Int. Conn.

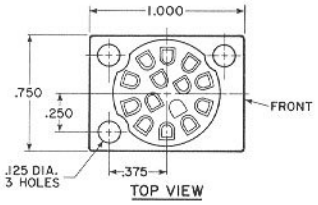
PRINTED CIRCUIT MOUNTING HOLE LAYOUT
- TOP VIEW -



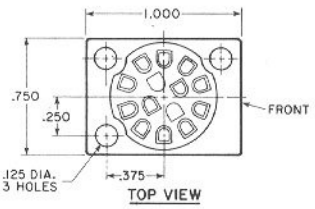
TOP VIEW OF P.C. BOARD MOUNTING HOLE LAYOUT



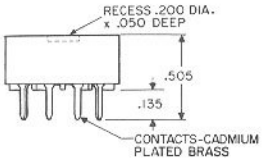
TOP VIEW



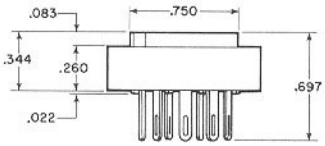
TOP VIEW



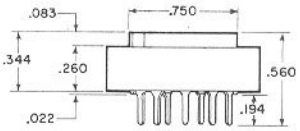
TOP VIEW



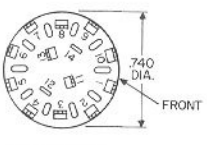
SIDE VIEW



SIDE VIEW

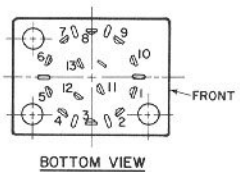


SIDE VIEW



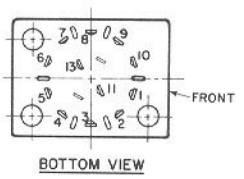
BOTTOM VIEW

RTS-14



BOTTOM VIEW

RTS-47 (MIL SPEC Material)
RTS-48 (Commercial Grade)



BOTTOM VIEW

RTS-49 (MIL SPEC Material)
RTS-50 (Commercial Grade)

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