

# Dieter's Nixie Tube Data Archive

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If you have more datasheets, articles, books, pictures or other information about Nixie tubes  
or other display devices please let me know.  
Thank you!

Document in this file	Burroughs – Bulletin 1116 – Dated June 1, 1967
Display devices in this document	B-5440-A, B-5441-A, B-5442-A



## NIXIE® INDICATOR TUBE

TYPE

**B-5440-A**  
**B-5441-A**  
**B-5442-A**

The B-5440-A NIXIE tube is a gas filled, cold cathode, ultra long life, decimal input, side viewing numerical (0-9) indicator tube having a common anode. The B-5441-A is identical to the B-5440-A except it has two decimal points (right and left of the numeral) inside the tube, which are independently operable (Note 2). The B-5442-A is available for plus-minus indication.

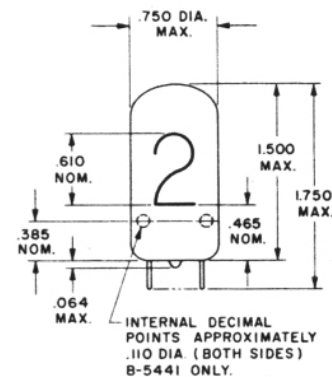
The narrow width of the tubes (.750" max.) permits 0.80" center-to-center spacing for multi-tube assemblies and its short seated height (1.5") allows minimal instrument panel height.

Printed circuit and wiring type sockets are also available. (See Pages 3 and 4, Bull. 1104)

An optional "keep-alive" is available for rapid ionization in time-sharing, strobe, photographic or dark environment applications.



B-5441-A



BOTTOM VIEW

Figure 1. Outline Drawing  
(Note 3)

## ELECTRICAL SPECIFICATIONS

## ABSOLUTE RATINGS

Ionization Voltage	+170 Vdc max. (Note 6)
Supply Voltage	+170 Vdc min. (Note 1)
Cathode Current	3.5 ma max.
Decimal Point Current (B-5441)	0.7 ma max.
Cathode Pre-bias Voltage	+65V to +120V (Note 7)

## TYPICAL OPERATING CONDITIONS (Figure 2)

Supply Voltage	+170 Vdc (Note 1)
Series Resistor	10K ohm (Notes 1 & 8)
Numeral Cathode Current	
(B-5440-A)	2.5 ma (1.5 to 3.0 ma)
(B-5441-A)	2.3 ma (2.0 to 3.5 ma)
Decimal Point Cathode Current	
(B-5441-A)	0.5 ma nom. (Note 2)
Cathode Pre-bias Voltage	+65V (Notes 2b & 7)

## MECHANICAL CHARACTERISTICS

Outline Drawing	Figure 1
Pin Connections	Table 1
Mounting	Note 3
Sockets	Bulletin 1104 Note 5
Recommended Printed Circuit	
Board Layout	Figure 3, Notes 4 & 5

Printed Circuit Pattern Layout	Figure 4
Color	Neon Red
Life (Dynamic)	200,000 hrs.
Brightness	200 footlamberts
Tube Pin Diameter	.030"
Tube Tip-Off Diameter	.250" max.
Tube Pin Circle	.458" ±.002"



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