

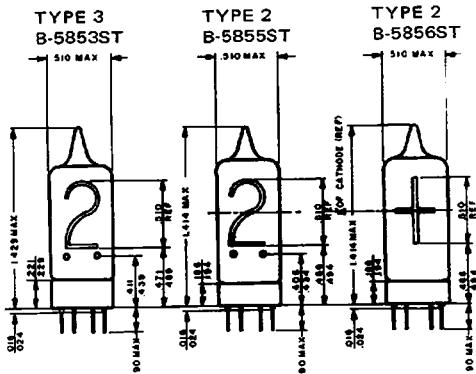
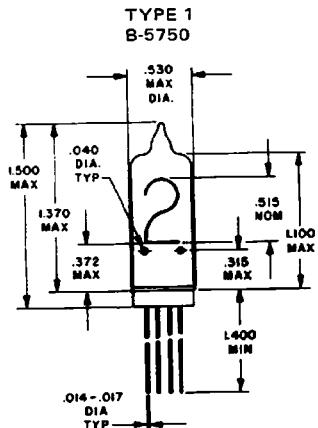
## LOW PRICED SIDE-VIEWING

### NIXIE INDICATOR TUBES

The low priced series NIXIE tubes are ultra-long life, high quality, cold-cathode indicator tubes having a common anode. They can display the numerals 0-9 and have two decimal points inside the tube (right and left of the numerals) which are independently operable. The numeral aspect ratio (height to width) has been designed to provide the optimum in readability and viewing distance. The small diameter of these tubes (0.530" max) permits 0.540" center-to-center mounting and their short seated height allows for minimal instrument panel dimensions. The B-5750 NIXIE tube is a low pressure device designed for d-c operation. It is not electrically interchangeable with the high pressure B-5755, B-5855, and B-5859 NIXIE tubes.

Character Size ..... 0.5"

Viewing Distance ..... 24.0'



Tube Outline Dimension Chart

### LOW COST SERIES NIXIE TUBES SPECIFICATIONS

#### CONDITION

##### Absolute Ratings

	B-5750	B-5853	B-5855
Ionization Voltage	170Vdc max	170Vdc max	170Vdc max
Supply Voltage	170Vdc min	170Vdc min	180Vdc min
Peak Anode Current	15ma max	17ma max	17ma max
Anode Current (D.C.)	4.5ma max	—	—
Decimal Point Current	0.3ma	3ma peak	3ma peak
Cathode Prebias	60Vdc to 120Vdc	—	—
Average Total Power Dissipation	0.5 watts	0.5 watts	0.5 watts

#### Typical Operating Conditions (Note 1)

	B-5750	B-5853	B-5855
Supply Voltage	170Vdc (7.5 KΩ)	170Vdc	200Vdc nom
Peak Anode Current	2.6ma typ	14ma typ	14ma typ
Pulse Durations	—	100 μs	100 μs

#### Duty Cycle

#### CONDITION

##### Absolute Ratings

	B-5856	B-5859	B-5870
Ionization Voltage	170Vdc max	170Vdc max	170Vdc max
Supply Voltage	170Vdc min	170Vdc min	170Vdc min
Peak Anode Current	—	—	—
Anode Current (D.C.)	2.8ma max	5.0ma max	4.5ma max
Decimal Point Current	—	0.1ma to 0.5ma	—
Cathode Prebias	60Vdc to 110Vdc	60Vdc to 110Vdc	60Vdc to 110 Vdc
Average Total Power Dissipation	0.5 watts	0.5 watts	0.5 watts

#### Typical Operating Conditions (Note 1)

	B-5856	B-5859	B-5870
Supply Voltage	170Vdc (15KΩ)	170Vdc (10KΩ)	170Vdc (7.5KΩ)
Anode Current (D.C.)	2.0ma typ	3.4ma typ	3.2ma typ
Pulse Durations	—	—	—

#### Duty Cycle

#### NOTE

1. The minimum supply voltage should be 170Vdc, however, the use of the highest voltage available with an appropriate series resistor is recommended. Typical load lines are 170Vdc-10KΩ, 200Vdc-22KΩ, 250Vdc-43KΩ, and 300Vdc-62KΩ. When choosing a load line other than the ones indicated, it should be chosen such that  $I_A$  is equal to or greater than the nominal operating current.

(continued from page 6)

#### PIN CONNECTIONS — B5750

	PIN NO.	CONNECTION
7 • 6	1—	Numeral 1
8 • 5	2—	Numeral 2
14 • 9 • 4 • 13	3—	Numeral 3
	4—	Numeral 4
	5—	Numeral 5
10 • 3	6—	Numeral 6
11 • 2	7—	Anode
	8—	Numeral 7
	9—	Numeral 8
12 • 1	10—	Anode*
BASING DIAGRAM	11—	Numeral 9
BOTTOM VIEW	12—	Numeral 0
	13—	Rt Dec Pt
	14—	Lft Dec Pt

\*Pin 10 removed from B-5850 Series.

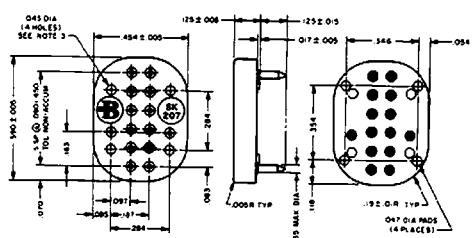
#### TUBE DESCRIPTIONS

TYPE	PRES-	OPER-	FORMAT	INTER-	CHANGE
SURE	SURE	ATION		WITH	
B-5750... I ...	Low..	D.C. ....	0-9 with d.p. on each ..	None	
			side of numeral.		
B-5755... I ...	High..	Pulsed .....	" .....	None	
B-5853... III ..	High..	Pulsed .....	" .....	B-5855	
B-5855.. II ...	High..	Pulsed .....	" .....	None	
B-5859.. II ...	High..	D.C. ....	" .....	None	
B-5870.. III ...	High..	D.C. ....	" .....	B-5859/ B-5870	
B-5856 .. II ...	Low ..	D.C. ....	(±) plus/minus .....	None	
B-5866 .. III ...	Low ..	Pulsed/DC(±)	plus/minus .....	B-5856	

The above tube type numbers are for long lead versions. For short lead versions, the following suffixes should be used.  
S-tube with minimum thickness spacer (0.130" max) and leads cut to 0.190" max.

ST-tube with thick spacer that makes them mechanically interchangeable with B-5755S.

SK-207



The SK-207 Sockets are intended for use with Burroughs B-5750S and B-5850S series NIXIE® tubes.