Burroughs Corporation

PLAINFIELD. NEW JERSEY

Bulletin No. 1027

NUMERICAL INDICATOR Engineering Data Report January 1, 1963

8422

(B5991) Ultra Long Life Rectangular NIXIER Tube

The 8422 (B5991) is a gas-filled, cold-cathode, rectangular numerical indicating tube containing a common anode and ten metallic cathodes. The cathodes are formed in the shape of numerals ("0" through "9"). The tube is intended for use as a direct in-line readout device. The width and depth of this tube are approximately 75% of standard size cylindrical types permitting side by side stacking in a minimum of panel space with no sacrifice in readability.

MECHANICAL DATA

ELECTRICAL DATA

Overall Length	1.120 Max.	Absolute Ratings
Seated Height	.862 Max.	Ionization Voltage 170 Vdc Max.
Bulb Width	.790 Max.	Supply Voltage 170 Vdc Min.
Bulb Length	1.020 Max.	(Note 1)
Numeral Height	.610 Nominal	Cathode Current 3.5 ma max.
Pin Connection	See figure 3	
Mounting Position	See note 2	Test Conditions (See Figure 1)
Weight	.3 oz. nom.	Supply Voltage (E) 170 Vdc
-		Series Resistor (R) 8.2 K
		Cathode Current
		(Minimum) 1.5 ma
		(Maximum) 3.0 ma
ENVIRONMENTAL DATA		

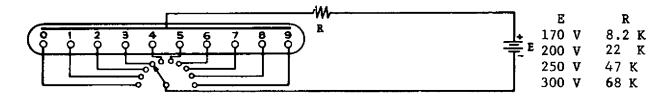


FIGURE 1. Basic Circuit

NOTES

- 1. The minimum supply voltage should be 170 volts. However, the use of highest available voltage with the appropriate series resistor is recommended to maintain cathode current within the specified limits. A supply voltage of 200 volts or more is recommended to assure proper operation at the temperature extremes.
- 2. The center line of the numbers to be displayed passes through pins 6 and 12 of the tube. The tube socket should be oriented so that pins 6 and 12 are in a vertical line with pin 12 at the top.

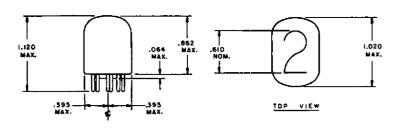


Figure 2. OUTLINE DRAWING

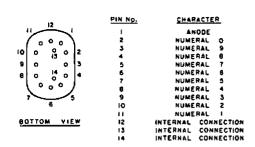


Figure 3. PIN CONNECTIONS

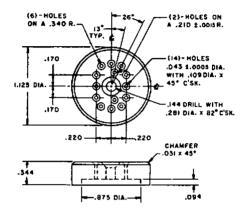


Figure 4. PIN STRAIGHTENER, LS-210

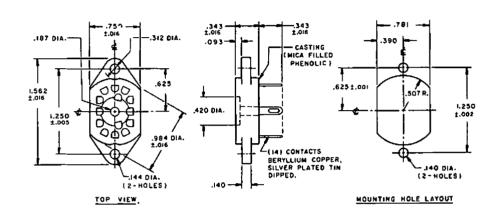


Figure 5. GENERAL PURPOSE SOCKET, SK-136

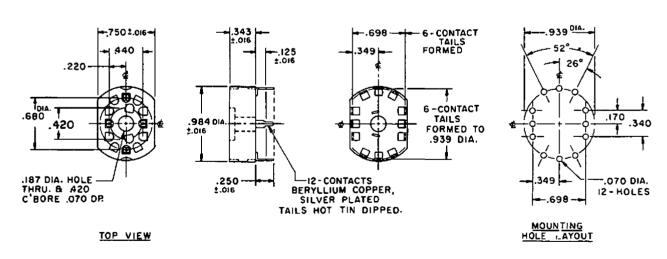


Figure 6. PRINTED CIRCUIT SOCKET, SK-144

