

DESCRIPTION

The Sylvania SC-3821 is a 7" round rear window cathode ray tube intended for either simultaneously photographing the electron image or for optical projection of overlay information for comparator applications. It also features character writing deflection plates of high sensitivity for producing alpha-numeric symbols positioned with the main deflection yoke. The high resolution electron gun is designed for use with a single pole ion trap to eliminate ion blemishes. The optical viewing window has an approximate useful diameter of $1\frac{15}{16}$ inches and is of ophthalmic quality.

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Phosphor*	P14
Fluorescence	Blue
Phosphorescence	Orange
Persistence	Medium

*In addition to the type shown, the SC-3821 can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage	$6.3 \pm 10\%$ Volts
Heater Current	540 to 660 Ma
Direct Interelectrode Capacitances (Approx.)	
K to all	5 pf
g1 to all	6 pf

MECHANICAL DATA

Overall Length (Approx.)	$17\frac{11}{16}$ Inches
Faceplate Diameter	7 Inches
Minimum Useful Screen Diameter	$6\frac{1}{8}$ Inches
Anode Terminal	J1-22

RATINGS

RATINGS (Absolute Maximum Values)

Anode Voltage	13,200 Volts dc
Focus Electrode Voltage	-550 to 1100 Volts dc
Grid No. 2 Voltage	770 Volts dc
Grid No. 1 Voltage	0 to -200 Volts dc

TYPICAL OPERATING CONDITIONS

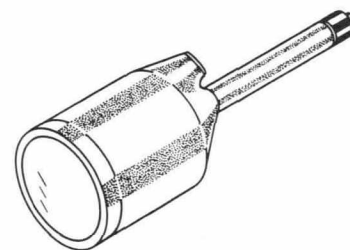
Anode Voltage	10,000 Volts dc
Focus Electrode Voltage	0 to +300 Volts dc
Grid No. 2 Voltage	300 Volts dc
Grid No. 1 Voltage for Cutoff	-30 to -75 Volts dc
Line Width at $I_b = 25 \mu a$	0.010 Inch Max.

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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QUICK REFERENCE DATA

Cathode Ray Tube
Rear Viewing Window
Electrostatic Focus
Magnetic Deflection
Ion Trap Design



BASING

Pin 1	— Heater
Pin 2	— Grid No. 1
Pin 6	— Focus
Pin 10	— Grid No. 2
Pin 11	— Cathode
Pin 12	— Heater

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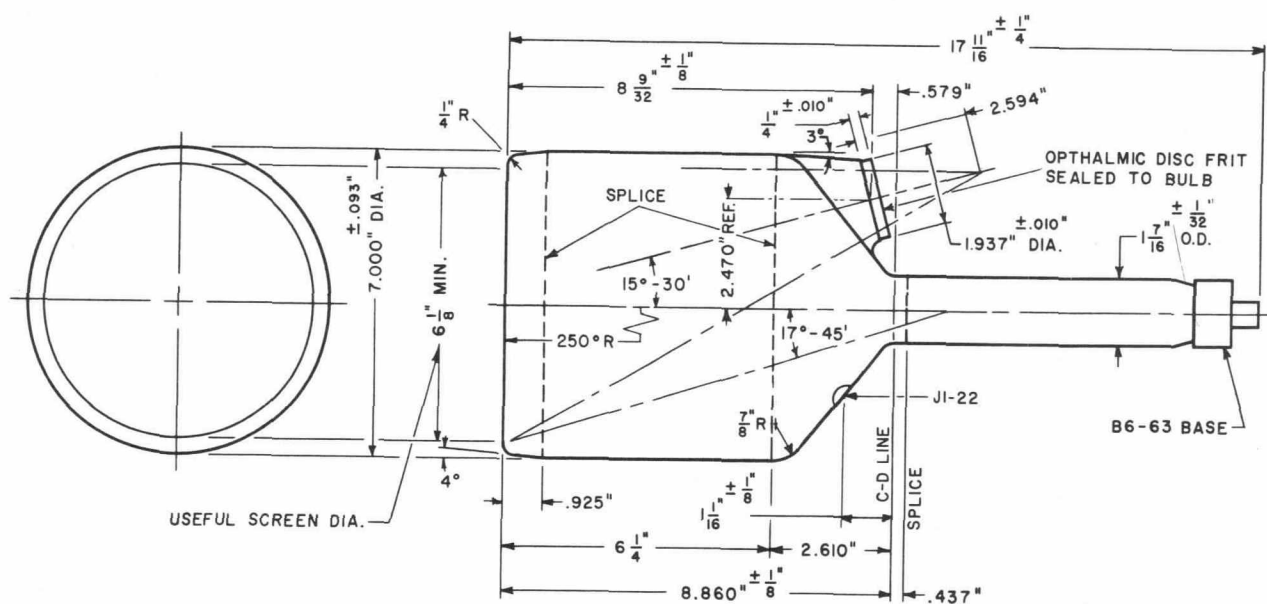
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File Under

SPECIAL AND GENERAL
PURPOSE CATHODE RAY TUBES

OUTLINE



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