

DESCRIPTION

The SC-3042 is a 5" flat face, high resolution cathode ray tube with electrostatic deflection and focus. It is designed as a mono-accelerator to provide minimum pattern distortion and maximum sensitivity; and is intended for applications where line widths less than 0.010 inches are required. The SC-3042 can be supplied with any of the following phosphors for varied applications: P1, P2, P4, P7, P11, P12, P15, P16, P19, P20, P25.

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Electrostatic
Faceplate	Clear

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	0.6 ± 10% Ampere

MECHANICAL DATA

Overall Tube Length	16 $\frac{3}{4}$ ± 3/16 Inches
Minimum Useful Screen Diameter	4 $\frac{1}{2}$ Inches
Base (Medium Shell Diheptal 12 Pin)	B12-37
Basing	14G
Bulb	J42P
D1-D2 Trace Aligns with Pin No 5 and Tube Axis	±10 Degrees
Positive Voltage on D1 (Pin #11) deflects beam approximately toward Pin #5	
Positive Voltage on D3 (Pin #7) deflects beam approximately toward Pin #2	
Angle Between D1-D2 and D3-D4 Traces	90 ± 1 Degrees

MAXIMUM RATINGS (Absolute Maximum Values)

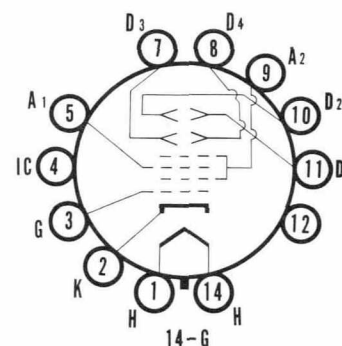
Anode No. 2 Voltage	5000 Volts	dc
Anode No. 1 (Focus Electrode) Voltage	3000 Volts	dc
Grid No. 1 Voltage		
Negative Bias Value	220 Volts	dc
Positive Bias Value	0 Volts	dc
Positive Peak Value	2 Volts	
Peak Voltage Anode No. 2 to any Deflecting Plate	±550 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	200 Volts	
Heater Positive with Respect to Cathode	200 Volts	

TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage	3000 Volts	dc
Grid No. 1 Voltage (for Spot Cutoff)	-64 to -96 Volts	dc
Anode No. 1 Voltage (for Focus)	1000-1600 Volts	dc
Deflection Factors		
D1-D2	80-100 Volts/in.	
D3-D4	40-50 Volts/in.	
Line Width at 30 Volts Above Spot Cutoff ¹	.010 Inches	Max.
Useful Scan		
D1-D2	4 $\frac{1}{2}$ Inches	Min.
D3-D4	4 Inches	Min.

QUICK REFERENCE DATA

High Resolution Tube
5" Direct Viewed
Electrostatic Deflection
Electrostatic Focus
Flat Face
Clear Faceplate



SYLVANIA ELECTRONIC TUBES

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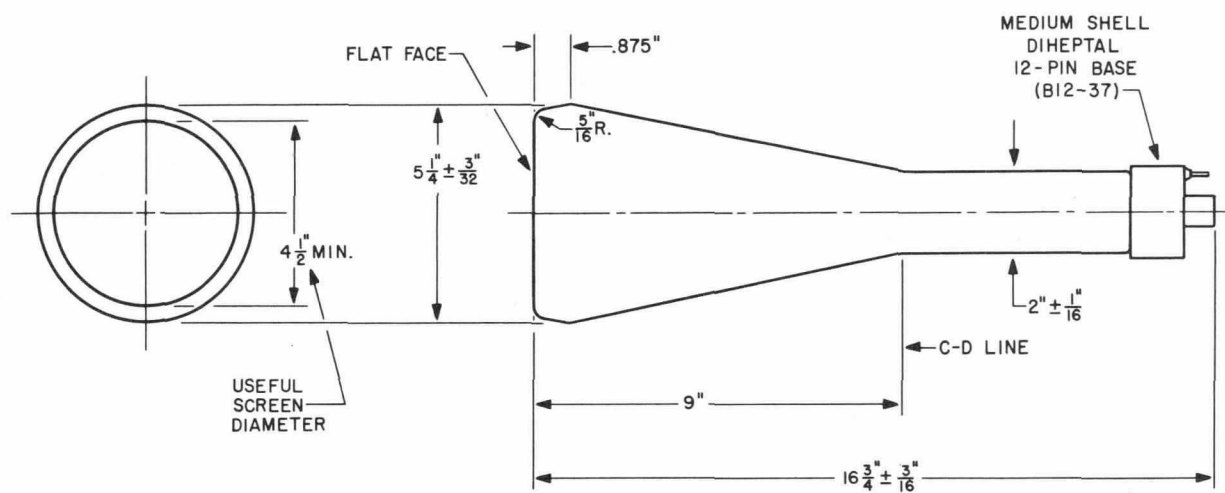
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File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

NOTE:

1. For maximum resolution over entire screen, it is recommended that dynamic focusing be used.

OUTLINE



D61033