ADVANCE DATA

DESCRIPTION

The Sylvania SC-3892P1 is a 5 gun, electrostatically focused and deflected cathode-ray tube, 16 inches in diameter, for displaying simultaneously, 5 independently controlled traces. It features monoaccelerator design for maximum pattern linearity and deflection factor uniformity. The tube is potted in a mu-metal shield with all tube connections being color coded flying leads.

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Electrostatic

In addition to P1, the SC-3892 can be supplied with several other screen phosphors.

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current (600 ma per Gun)	3.0 ± 10 % Amperes
Direct Interelectrode Capacitances (Approx.)	Each Gun
Cathode to All	To Be Determined
Grid No. 1 to All	To Be Determined
D1 to D2	To Be Determined
D3 to D4	To Be Determined
D1 to All Other Electrodes	To Be Determined
D2 to All Other Electrodes	To Be Determined
D3 to All Other Electrodes	To Be Determined
D4 to All Other Electrodes	To Be Determined

MECHANICAL DATA

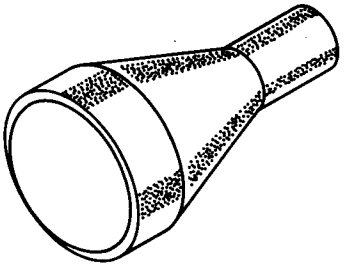
Overall Length	26½ ± ⅜ Inches
Minimum Useful Screen Diameter	15 Inches
Basing	Color Coded Leads
Trace Alignment	
D1-D2 Trace Aligns with D3-D4 Trace (Each Gun)	90 ± 1 Degree
D1-D2 Traces of All Guns are Parallel	±1 Degree

MAXIMUM RATINGS (Absolute Maximum Values)

Anode No. 2 Voltage	5500 Volts
Astigmatism Electrode Voltage	5500 Volts
Focus Electrode Voltage	3000 Volts
Grid No. 1 Voltage	
Negative Bias Value	220 Volts
Positive Bias Value	0 Volt
Positive Peak Value	2 Volts
Peak Heater to Cathode Voltage	
Heater Negative with Respect to Cathode	200 Volts
Heater Positive with Respect to Cathode	200 Volts
Peak Voltage Between Anode and Astigmatism Electrode or Any Deflecting Plate	1500 Volts

QUICK REFERENCE DATA

5 Gun Design
Electrostatic Focus
Electrostatic Deflection
16" Diameter
Monoaccelerator Design
Potted in Mu-Metal
Color Coded Leads



For Basing
Diagram See
Page 3

SYLVANIA ELECTRIC PRODUCTS INC.

Electronic Components Group
ELECTRONIC TUBE DIVISION
SENECA FALLS, NEW YORK

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File Under

SPECIAL AND GENERAL PURPOSE CATHODE RAY TUBES

TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage	3000 Volts	dc
Astigmatism Electrode Voltage	2900-3100 Volts	dc
Focus Electrode Voltage	850 to −1500 Volts	dc
Grid No. 1 Voltage[2]	−50 to −100 Volts	dc
Line Width "A"[3]	0.035 Inches	Max.
Deflection Factors		
D1-D2	80 V/in.	Max.
D3-D4	80 V/in.	Max.
Deflection Factor Uniformity[4]	1½ Percent	Max.
Undeflected Spot Position (All Guns)	Within 1 Inch Square at Geometric Center of Face	
Useful Scan		
D1-D2	±7½ Inches	
D3-D4	±7½ Inches	
Interaction Factor[5]	6 x 10^{-5} In./Volts	Max.

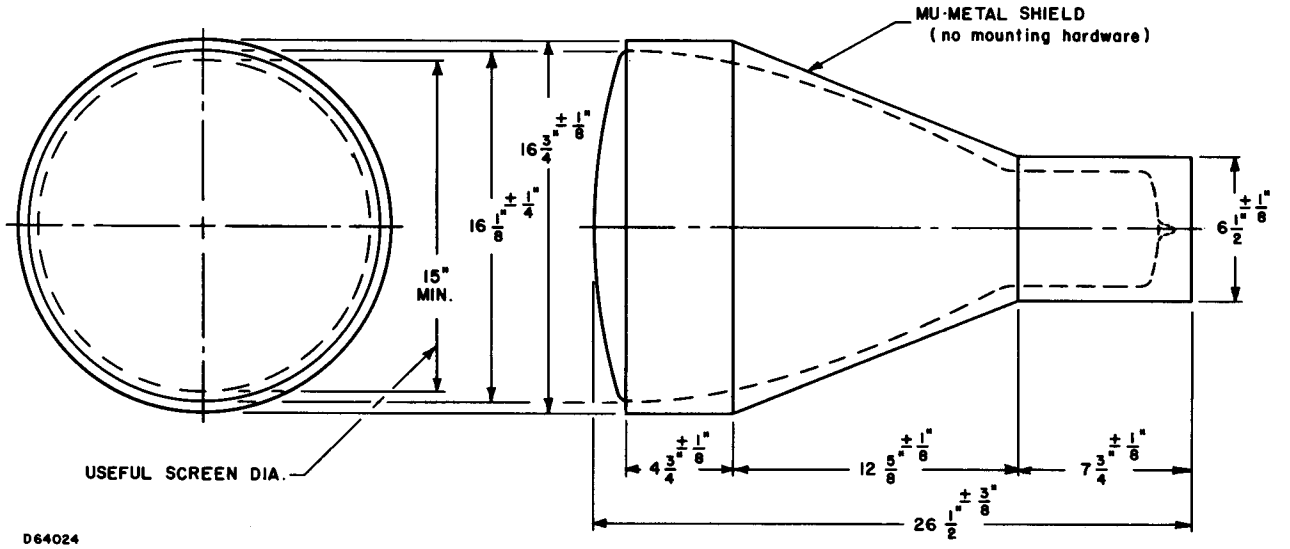
CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms	Max.
Deflection Circuit Resistance	1.0 Megohm	Max.

NOTES:

1. *Values are for each gun unless otherwise specified.*
2. *Visual extinction of undeflected focused spot.*
3. *Per MIL-E-1 and at a control grid voltage of 25 volts above spot cutoff.*
4. *The deflection factor (for both D1-D2 and D3-D4 plate pairs separately) for a deflection of 75 % of the minimum useful scan will not differ from the deflection factor at 25 % of the minimum useful scan by more than the indicated value.*
5. *The deflection on one beam when balanced dc voltages are applied to the deflection electrodes of either of the other two guns shall be less than the specified value.*

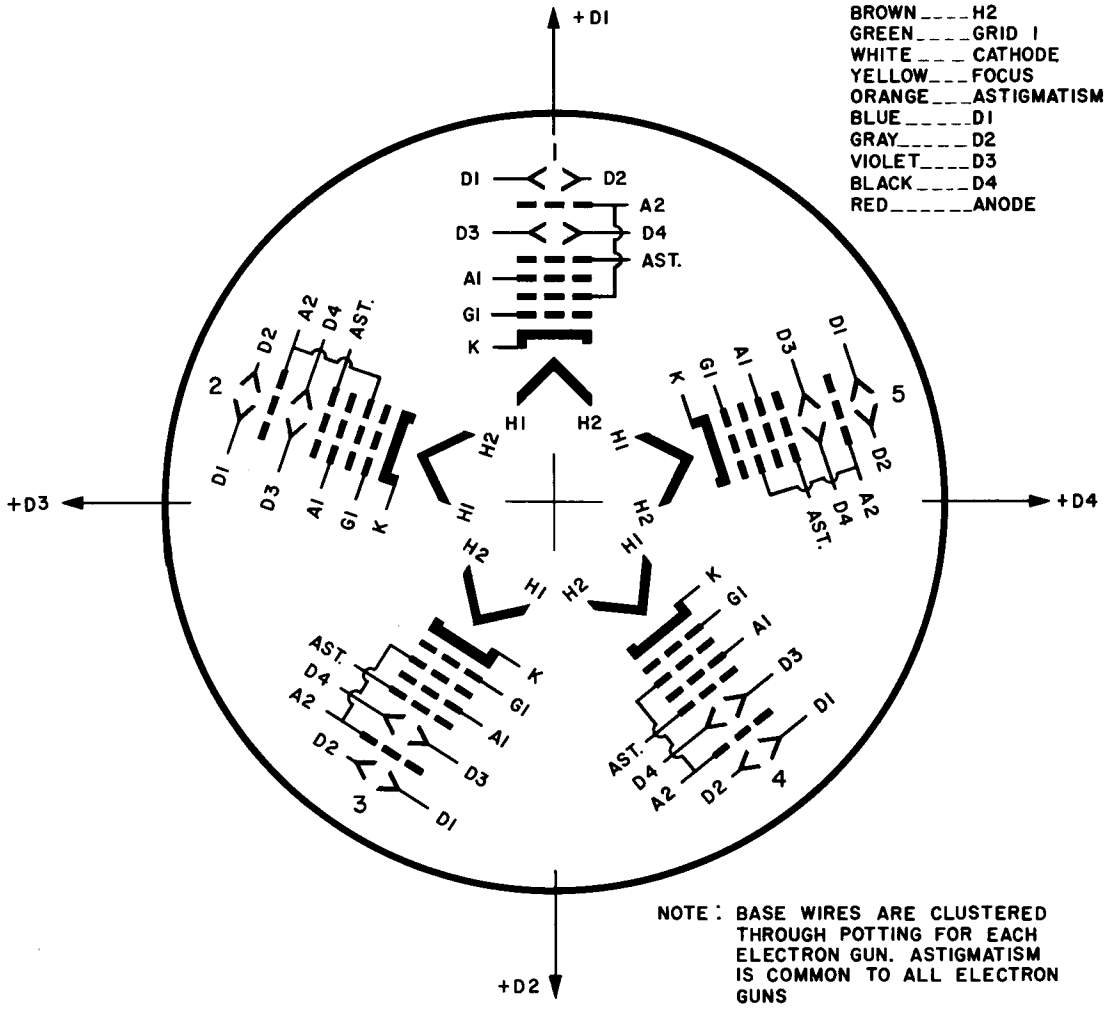
OUTLINE



BASING DIAGRAM

Color Coded Base Wires
(MIN. LENGTH 18 INCHES)

BROWN____H1
BROWN____H2
GREEN____GRID 1
WHITE____CATHODE
YELLOW___FOCUS
ORANGE___ASTIGMATISM
BLUE_____D1
GRAY_____D2
VIOLET____D3
BLACK____D4
RED______ANODE



NOTE: BASE WIRES ARE CLUSTERED THROUGH POTTING FOR EACH ELECTRON GUN. ASTIGMATISM IS COMMON TO ALL ELECTRON GUNS

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VIEW FROM BASE END OF TUBE