



**ADVANCE DATA**

**DESCRIPTION**

The Sylvania SC-3369 is a 16" diameter, all glass cathode ray tube for character writing applications. Two pairs of electrostatic deflection plates are provided for character generation while character positioning is by means of magnetic deflection. The tube is electrostatically focused and has an aluminized screen.

**CHARACTERISTICS**

**GENERAL DATA**

Focusing Method . . . . .	Electrostatic
Deflecting Method <sup>1</sup> . . . . .	Electrostatic and Magnetic
Bulb . . . . .	J127B
Phosphor Number . . . . .	P7
Fluorescent Color . . . . .	Blue
Phosphorescent Color . . . . .	Yellow
Persistence . . . . .	Long

**ELECTRICAL DATA**

Heater Voltage . . . . .	6.3 Volts
Heater Current at 6.3 Volts . . . . .	0.6 ± 10 % Ampere
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes . . . . .	3.8 pf
Grid No. 1 to All Other Electrodes . . . . .	7.5 pf
D1 to D2 . . . . .	1.0 pf
D3 to D4 . . . . .	1.0 pf
D1 to All Other Electrodes . . . . .	2.8 pf
D2 to All Other Electrodes . . . . .	2.8 pf
D3 to All Other Electrodes . . . . .	3.1 pf
D4 to All Other Electrodes . . . . .	2.8 pf

**RATINGS (Design Center Values)**

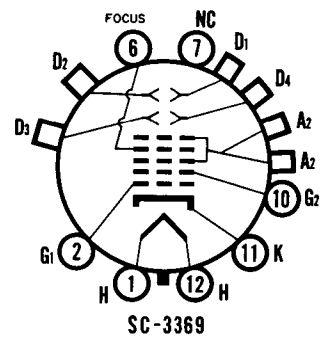
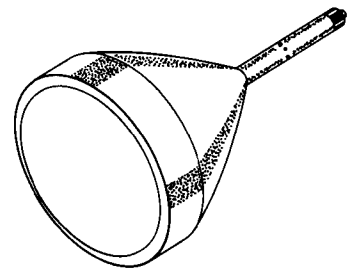
Accelerator Voltage . . . . .	15,000 Volts dc	Max.
Accelerator Input . . . . .	8 Watts	Max.
Focusing Electrode Voltage . . . . .	5600 Volts dc	Max.
Grid No. 2 Voltage . . . . .	700 Volts dc	Max.
Grid No. 1 Voltage		
Negative Bias Value . . . . .	300 Volts dc	Max.
Positive Bias Value . . . . .	0 Volt dc	Max.
Positive Peak Value . . . . .	0 Volt	Max.
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
During Warm-up Period Not to Exceed		
15 Seconds . . . . .	410 Volts	Max.
After Equipment Warm-up Period . . . . .	180 Volts	Max.
Heater Positive with Respect to Cathode . . . . .	180 Volts	Max.
Peak Voltage Between Accelerator and		
Any Deflection Electrode . . . . .	500 Volts	Max.

**TYPICAL OPERATING CONDITIONS**

Accelerator Voltage . . . . .	12,000 Volts dc	
Focusing Electrode Voltage . . . . .	3000 to 4400 Volts dc	
Grid No. 2 Voltage . . . . .	400 Volts dc	
Grid No. 1 Voltage <sup>3</sup> . . . . .	-35 to -70 Volts dc	
Modulation <sup>2</sup> . . . . .	30 Volts	Max.
Line Width "A" <sup>2</sup> . . . . .	0.012 Inch	Max.
Deflection Factors		
D1 and D2 . . . . .	315 to 385 Volts dc/Inch	
D3 and D4 . . . . .	330 to 410 Volts dc/Inch	
Focusing Electrode Current For Any Operating Condition	-10 to +5 μA	
Spot Position (Focused and Undelected) <sup>4</sup> . . . . .	Within a 25 mm Square	
Maximum Grid No. 2 Current For Any Operating Position	5 μA	

**QUICK REFERENCE DATA**

Character Writing Tube  
 16" Diameter  
 Electrostatic and Magnetic  
 Deflection  
 Electrostatic Focus  
 Aluminized Screen



**SYLVANIA ELECTRIC PRODUCTS INC.**

**Electronic Components Group  
 ELECTRONIC TUBE DIVISION  
 SENECA FALLS, NEW YORK**

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 PAGE 1 OF 2  
 File Under

**SPECIAL AND GENERAL  
 PURPOSE CATHODE RAY TUBES**

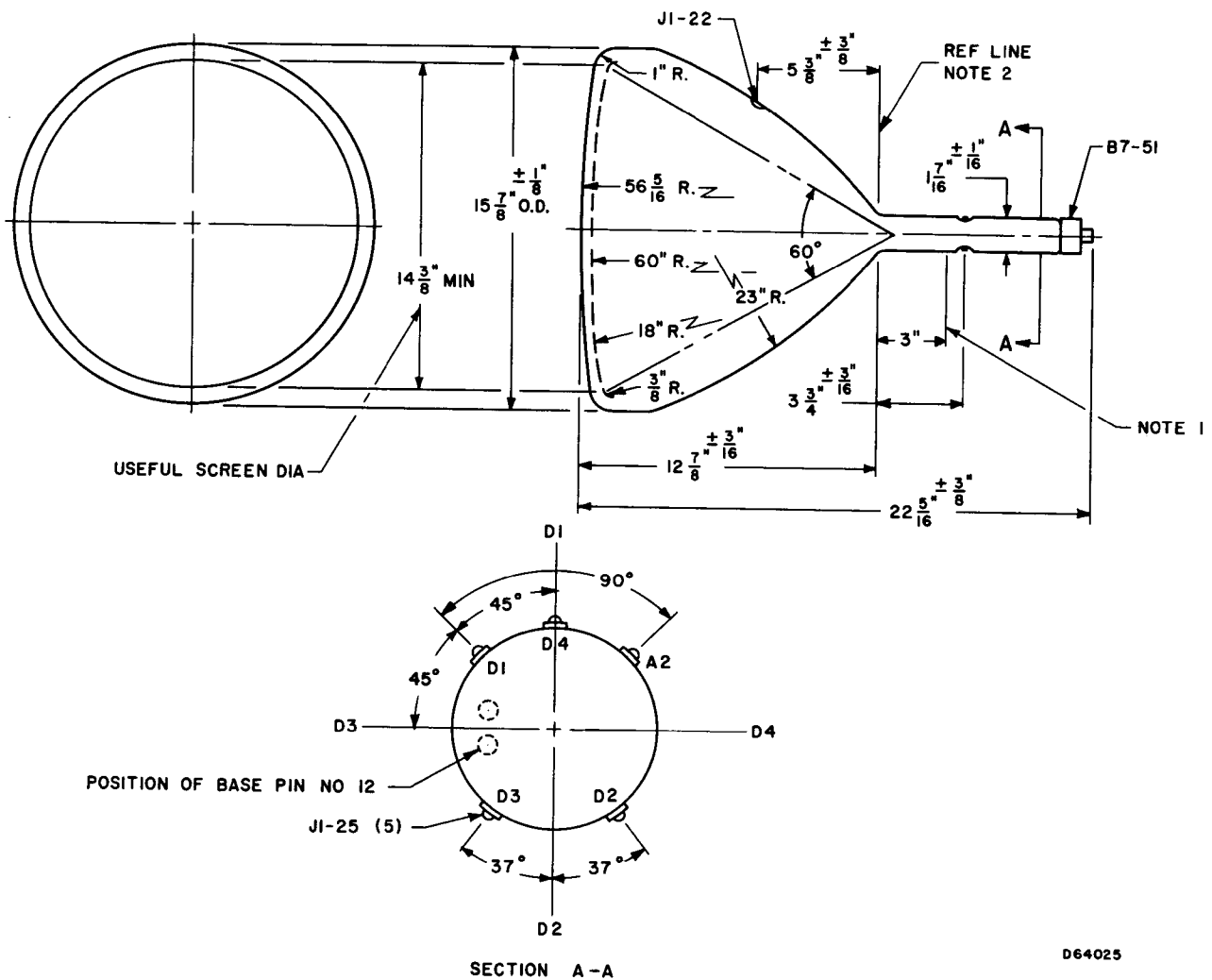
**MAXIMUM CIRCUIT VALUES**

Grid No. 1 Circuit Resistance . . . . .	1.5 Megohms Max.
Resistance in Any Deflecting-Electrode Circuit <sup>5</sup> . . . . .	5.0 Megohms Max.

**NOTES:**

1. The electrostatic deflection plates are designed to form a 1/2 inch square raster which can be deflected to any portion of the screen by the magnetic deflection yoke. Larger rasters may be used with a corresponding decrease in magnetic deflection area.
2. Measured in accordance with MIL-E-1 specifications, with  $I_b = 25 \mu A$ .
3. Visual extinction of the undeflected focused spot.
4. Connect deflecting electrodes to accelerator.
5. It is recommended that the deflecting electrode-circuit resistances be approximately equal.

**OUTLINE**



**DIAGRAM NOTES:**

1. The magnetic deflection field should not extend below this line.
2. Point where JEDEC G-112 reference line gauge will stop.