

DESCRIPTION

Sylvania Type SC-2795 is an electrostatic charge printing tube designed for use in high speed printing equipment. It is a cathode-ray tube which has as a target for the beam, an array of fine, closely spaced, wires extending through the bulb wall. Deflection and modulation of the beam striking the wires will produce charge patterns on a dielectric in contact with the outer surface of the tube.

In the printing application, a moving strip of paper, used as the dielectric, has charge patterns deposited on it which can be developed and fixed to produce permanent visual records. Both black-and-white and half-tone copy can be produced.

The fine focus beam of the SC-2795, the small wire size and close spacing in the array, and the low capacitance between wire elements, permit high resolution along with extremely rapid printing. The SC-2795 can be used for single line scanning, and the .160" height of the array permits two-dimensional scanning for other types of operation. The useful printing width of the array is $2\frac{3}{4}$ inches.

The SC-2795 was developed for the A. B. Dick Company, 5700 West Touhy Avenue, Chicago 48, Illinois for use in their Videograph Data Presentation Systems.

ELECTRICAL DATA

Focusing Method	Magnetic
Deflection Method	Magnetic
Horizontal Deflection Angle (Approx.)	24 Degrees
Heater Current at 6.3 Volts	600 ± 30 Ma
Direct Interelectrode Capacitances (Approx.)	
Cathode to All Other Electrodes	5 μmf
Grid No. 1 to All Other Electrodes	8 μmf

MECHANICAL DATA

Printing Head

0.001" Diameter Conductive Elements Spaced	
Approximately 0.004" on Centers in Both Directions.	
Minimum Useful Printing Array Width	2.750 Inches
Minimum Useful Printing Array Height	0.160 Inches
Array Thickness (Approx.)	.050 Inches
Overall Length	$19 \pm \frac{3}{8}$ Inches
Width	$3\frac{1}{4} \pm \frac{1}{32}$ Inches
Height	$1\frac{3}{4} \pm \frac{1}{32}$ Inches
Neck Length	$14\frac{5}{8} \pm \frac{1}{4}$ Inches
Neck Diameter	$1\frac{7}{16} \pm \frac{1}{16}$ Inches
Bulb Contact	C1-3
Base	B5-57
Basing	12D
Weight (Approx.)	1 Pound

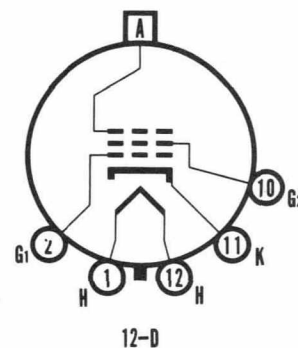
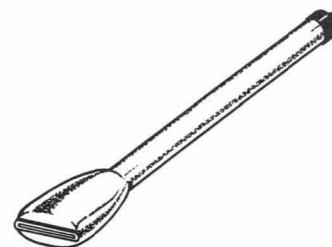
MAXIMUM RATINGS (Absolute Maximum System)

Unless Otherwise Specified, All Voltages are Positive with Respect to Cathode.

Maximum Anode Voltage	25,000 Volts	
Maximum Grid No. 2 Voltage	700 Volts	
Grid No. 1 Voltage		
Maximum Negative Value	155 Volts	dc
Maximum Negative Peak Value	200 Volts	
Maximum Positive Value	0 Volts	dc
Maximum Heater Voltage	6.9 Volts	
Minimum Heater Voltage	5.7 Volts	
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	200 Volts	
Heater Positive with Respect to Cathode	200 Volts	

QUICK REFERENCE DATA

Electrostatic Charge
Printing Tube
Magnetic Deflection
Magnetic Focus
High Speed Printing
High Resolution
Printing Dimensions :
.16" x 2.75" Minimum



SYLVANIA ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

PICTURE TUBE OPERATIONS
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

DECEMBER, 1961

PAGE 1 OF 2

File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

TYPICAL OPERATING CONDITIONS — Grid Drive Service

Unless Otherwise Specified, All Voltages are Positive with Respect to Cathode.

Anode Voltage	20,000 Volts	dc
Grid No. 2 Voltage	300 Volts	dc
Grid No. 1 Voltage for Cutoff	-40 to -77 Volts	dc
Focusing Coil Current ¹	70 ± 10 Ma	dc

NOTE:

1. For JEDEC Focus Coil No. 122 or equivalent, with the combined Grid No. 1 bias voltage and video-signal voltage adjusted to produce 100 μ a anode current. Distance from tube face to center of air gap on focus coil is $7\frac{3}{8}$ inches.

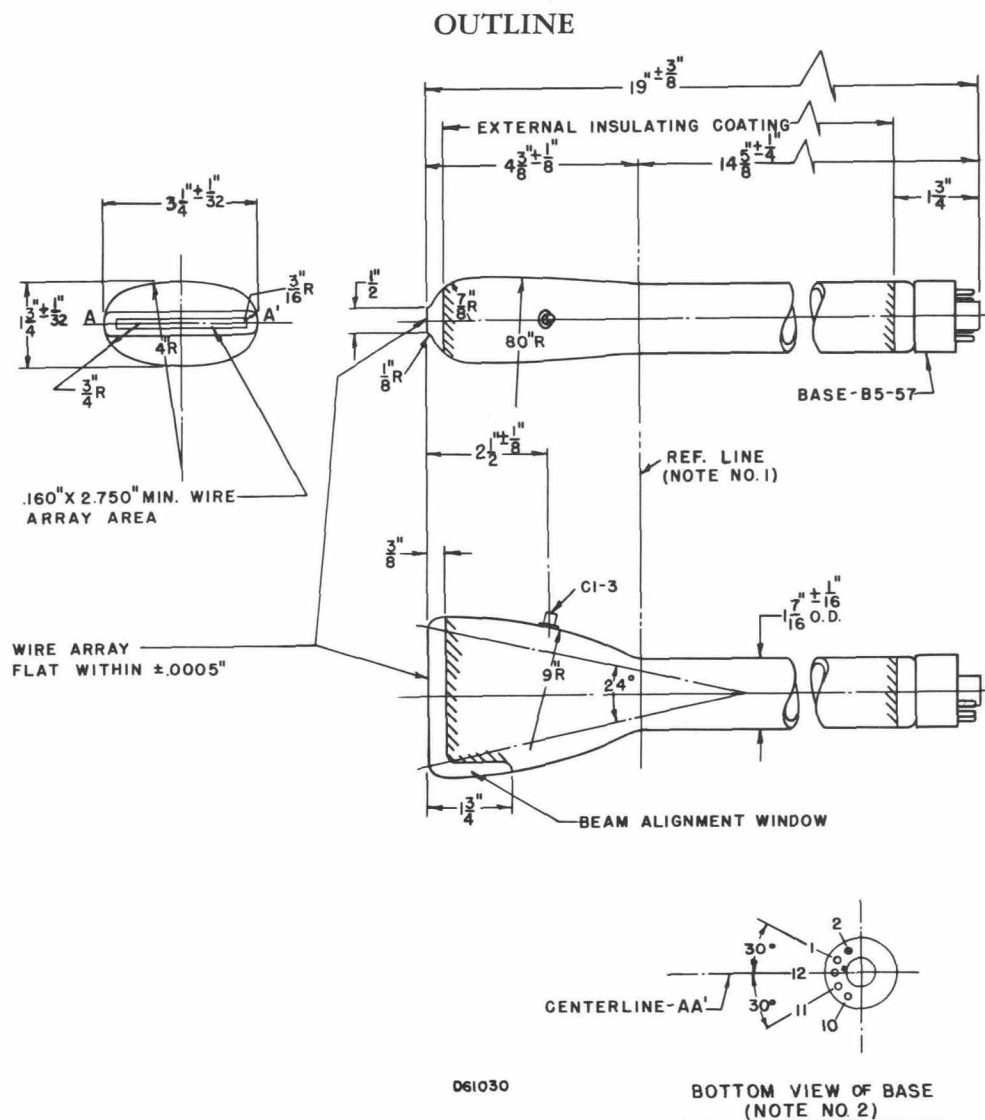


DIAGRAM NOTES:

1. Reference line determined by plane where JEDEC Gauge No. 112 (a cylinder 1.500 " $\pm .003$ " — $.000$ " I.D. and 2" long) will stop against body of bulb.
2. Base Pin No. 12 aligns with horizontal centerline (A-A') within 30° and is on the side opposite the anode contact, (C1-3).