

engineering data service

SC-2795

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 | : |
|--|------------|
| Deflection Method | ; |
| Horizontal Deflection Angle (Approx.) 24 | Degrees |
| Heater Current at 6.3 Volts 600 \pm 30 | Ma |
| Direct Interelectrode Capacitances (Approx.) | |
| Cathode to All Other Electrodes | $\mu\mu f$ |
| Grid No. 1 to All Other Electrodes | $\mu\mu f$ |

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 Inc | hes | | | | | | | | | | | | |
| Minimum Useful Printing Array Height 0.160 Inc | | | | | | | | | | | | | |
| Array Thickness (Approx.) | | | | | | | | | | | | | |
| Overall Length | hes | | | | | | | | | | | | |
| Width | hes | | | | | | | | | | | | |
| Height | hes | | | | | | | | | | | | |
| Neck Length | | | | | | | | | | | | | |
| Neck Diameter $1\frac{7}{16} \pm \frac{1}{16}$ Inc | hes | | | | | | | | | | | | |
| Bulb Contact | | | | | | | | | | | | | |
| Base | | | | | | | | | | | | | |
| Basing | | | | | | | | | | | | | |
| Weight (Approx.) 12D | ınd | | | | | | | | | | | | |

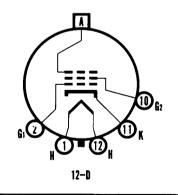
MAXIMUM RATINGS (Absolute Maximum System)

| Unless Otherwise Specified, All Volta | ages | are | Pos | siti | ve | wit | h I | 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 t | o Ca | tho | lе | | | | | 200 Volts | |
| Heater Positive with Respect to | o Ca | thoo | le | | | | | 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

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File Under

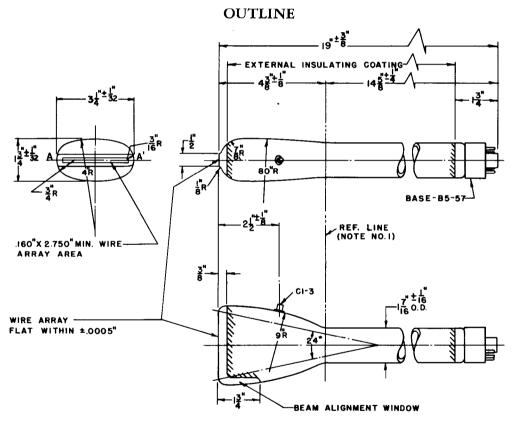
SPECIAL AND GENERAL PURPOSE CATHODE RAY TUBES

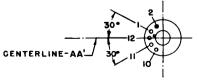
TYPICAL OPERATING CONDITIONS - Grid Drive Service

| Unless Otherwise Specified, A | 711 Z | Vol | tag | es a | ıre | Pos | sitiv | ve v | wit | h R | est | peci | t to | Ca | tho | ode. | | | | | |
|------------------------------------|-------|-----|-----|------|-----|-----|-------|------|-----|-----|-----|------|------|----|-----|------|---|--|--|-------------------------|----|
| 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 | | | | | | | | | | | | | | | | | | | | $70 \pm 10 \text{Ma}$ | 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 µa anode current. Distance from tube face to center of air gap on focus coil is 73/8 inches.





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BOTTOM VIEW OF BASE (NOTE NO. 2)

DIAGRAM NOTES:

- 1. Reference line determined by plane where JEDEC Gauge No. 112 (a cylinder 1.500" + .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).