

CHARACTERISTICS

GENERAL DATA

| | | | |
|-------------------|---------------|-----------------|-------------|
| Focusing Method | Electrostatic | | |
| Deflection Method | Electrostatic | | |
| Types* | Fluorescence | Phosphorescence | Persistence |
| 3ASP1 | Green | | Medium |
| 3ASP2 | Blue-Green | Green | Long |
| 3ASP11 | Blue | | Short |
| Faceplate | Flat, Clear | | |

*In addition to the types shown, the 3ASP- can be supplied with several other screen phosphors.

ELECTRICAL DATA

| | |
|--|------------------|
| Heater Voltage | 6.3 Volts |
| Heater Current | 0.6 ± 10% Ampere |
| Direct Interelectrode Capacitances (approx.) | |
| Grid No. 1 to All Other Electrodes | 4.5 μmf |
| Between Deflection Plates 1-2 | 2.0 μmf |
| Between Deflection Plates 3-4 | 2.5 μmf |
| Deflection Plate 1 to All Other Electrodes | 6.5 μmf |
| Deflection Plate 2 to All Other Electrodes | 6.0 μmf |
| Deflection Plate 3 to All Other Electrodes | 5.5 μmf |
| Deflection Plate 4 to All Other Electrodes | 5.5 μmf |

MECHANICAL DATA

| | |
|----------------------------------|-------------------|
| Minimum Useful Screen Dimensions | |
| Horizontal | 2 3/4 Inches |
| Vertical | 1 1/8 Inches |
| Bulb | LEA 448 or Equiv. |
| Base | B8-218 |
| Basing | 8KF |
| Anode No. 2 Contact | J1-22 |
| Base Alignment | |

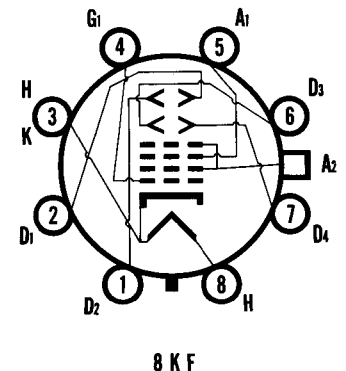
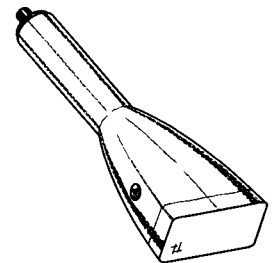
Pin #3 aligns with major axis of tube face within 10°, and is on same side as anode contact (J1-22)

Trace Alignment

- Positive Voltage on D1 (Pin #2) with respect to D2, (Pin #1) deflects spot approximately toward Pin #3.
 - Positive Voltage on D3 (Pin #6) with respect to D4, (Pin #7) deflects spot approximately toward Pin #5.
 - Angle between D1-D2 and D3-D4 traces 90 ± 1 Degree
 - Angle between D1-D2 and major axis of tube face 0 ± 1 1/2 Degrees
- Deflection Plates
- D1 and D2 are nearer to the tube face
 - D3 and D4 are nearer the base

QUICK REFERENCE DATA

- 1 1/2" x 3" Direct Viewed
- Rectangular Glass Type
- Clear, Pressed Faceplate
- Electrostatic Deflection
- Electrostatic Focus
- High Deflection
- Sensitivity



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

MARCH, 1960

PAGE 1 OF 3

File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

| | | |
|--|-------------|----|
| Anode No. 2 Voltage | 3000 Volts | dc |
| Anode No. 2 Input | 6.0 Watts | |
| Anode No. 1 Voltage (Focusing Electrode) | 1200 Volts | dc |
| Grid No. 1 Voltage | | |
| Negative Bias Value | 140 Volts | dc |
| Positive Bias Value | 0 Volts | dc |
| Positive Peak Value | 2 Volts | |
| Peak Voltage between Anode No. 2 and Any | | |
| Deflection Plate | 600 Volts | |
| Altitude | 35,000 Feet | |

TYPICAL OPERATING CONDITIONS

| | | |
|---|-----------------------|---------|
| Anode No. 2 Voltage | 2000 Volts | dc |
| Anode No. 1 Voltage for Focus | 400 to 700 Volts | dc |
| Grid No. 1 Voltage Required for Cutoff ¹ | -40 to -70 Volts | dc |
| Deflection Factors | | |
| Deflection Plates 1-2 | 68 to 92 Volts | dc/Inch |
| Deflection Plates 3-4 | 28 to 38 Volts | dc/Inch |
| Spot Position (Undelected, Focused) ² | Within a 15 mm Square | |
| P1 Light Output ⁴ | 20 Ft. L. | Min. |
| Modulation ⁵ | 38 Volts | dc Max. |
| Line Width A ⁶ | 0.65 mm | Max. |

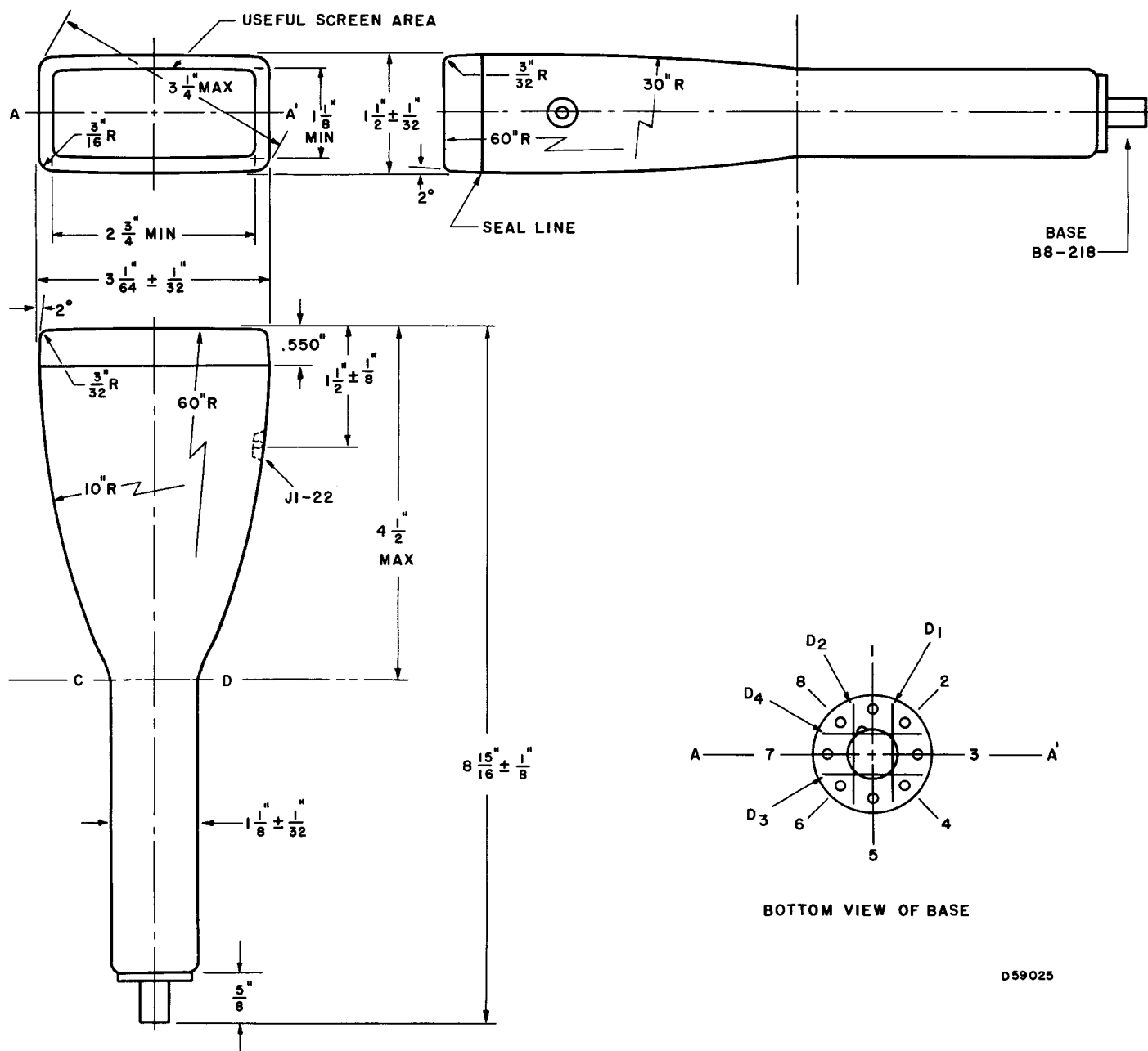
CIRCUIT VALUES

| | |
|--|------------------|
| Grid No. 1 Circuit Resistance | 1.5 Megohms Max. |
| Deflection Circuit Resistance ³ | 1.0 Megohms Max. |

NOTES:

1. Visual extinction of undeflected focused spot.
2. With the tube shielded and with the deflection plates connected to Anode No. 2, the square shall be centered on the tube face with its sides parallel to the deflection axis.
3. It is recommended that the deflecting electrode circuit resistances be approximately equal.
4. Raster size 1 1/8" x 1 9/16".
5. Measured at 20 Ft. L. on a raster 1 1/8" x 1 9/16".
6. Measured by compressed raster method starting with conditions of Note 5.

OUTLINE



BOTTOM VIEW OF BASE