

CHARACTERISTICS

GENERAL DATA

| | |
|--|---------------|
| Focusing Method | Electrostatic |
| Deflection Method | Electrostatic |
| Types* Fluorescence Phosphorescence Persistence | |
| 5BTP1. Green ———— Medium | |
| 5BTP2 Blue-Green Green Long | |
| 5BTP7 Blue-White Yellow Long | |
| 5BTP11 Blue ———— Short | |
| Faceplate | Clear, Flat |

*In addition to the types shown, the 5BTP- can be supplied with several other screen phosphors.

ELECTRICAL DATA

| | |
|--|-------------------|
| Heater Voltage | 6.3 Volts |
| Heater Current | 0.6 ± 10% Amperes |
| Direct Interelectrode Capacitances (approx.) | |
| Cathode to All Other Electrodes | 5.0 μmf |
| Grid No. 1 to All Other Electrodes | 8.0 μmf |
| D1 to D2 | 2.0 μmf |
| D3 to D4 | 3.0 μmf |
| D1 to All Other Electrodes | 10.5 μmf |
| D2 to All Other Electrodes | 8.5 μmf |
| D3 to All Other Electrodes | 8.5 μmf |
| D4 to All Other Electrodes | 9.5 μmf |

MECHANICAL DATA

| | |
|---|-----------------------|
| Minimum Useful Screen Diameter | 4½ Inches |
| Bulb | LEA-407 or Equivalent |
| Bulb Contact (Recessed Small Ball Cap) | J1-22 |
| Base (Small Shell Duodecal 12-Pin) | B12-43 |
| Basing | See Diagram |
| Bulb Contact Alignment | |
| J1-22 Contact Aligns with D1-D2 Trace. | ± 10 Degrees |
| J1-22 Contact on Same Side as Pin No. 4 | |
| Base Alignment | |
| D1-D2 Trace Aligns with Pin No. 4 and Tube Axis | 0 ± 10 Degrees |
| Positive Voltage on D1 Deflects Beam approximately Toward Pin No. 4 | |
| Positive Voltage on D3 Deflects Beam approximately Toward Pin No. 1 | |
| Angle Between D3-D4 and D1-D2 Traces | 90 ± 1 Degrees |
| Deflection Plates | |
| D1-D2 are Closer to Screen | |
| D3-D4 are Closer to Base | |
| Weight (approx.) | 2 Pounds |

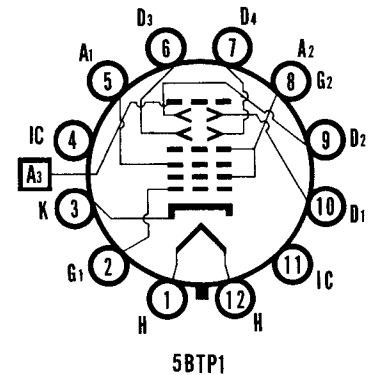
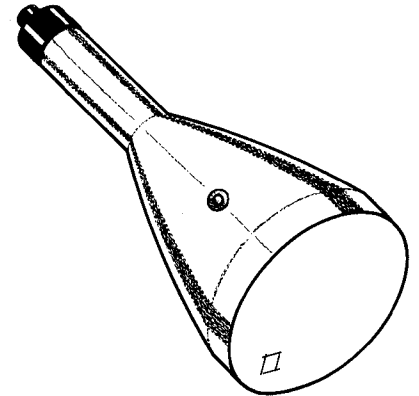
RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

| | |
|--|---------------|
| Anode No. 2 Input | 6 Wats |
| Anode No. 3 Voltage | 4400 Volts dc |
| Anode No. 2 Voltage | 2700 Volts dc |
| Ratio Anode No. 3 to Anode No. 2 Voltage | 2.1 Max. |
| Anode No. 1 (Focusing Electrode) | 1100 Volts dc |

QUICK REFERENCE DATA

- Oscilloscope Tube
- 5" Direct Viewed
- Round Glass Type
- Flat, Clear Faceplate
- Short Length
- Electrostatic Deflection
- Electrostatic Focus
- Post Deflection Accelerator
- High Deflection Sensitivity



**SYLVANIA
ELECTRONIC TUBES**

A Division of
Sylvania Electric Products Inc.

**PICTURE TUBE OPERATIONS
SENECA FALLS, NEW YORK**

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File Under
**SPECIAL PURPOSE
CATHODE RAY TUBES**

MAXIMUM RATINGS (Absolute Maximum Values) (cont'd)

| | | |
|--|-----------|--------------|
| Grid No. 1 Voltage | | |
| Negative Bias Value | | 140 Volts dc |
| Positive Bias Value | | 0 Volts dc |
| Positive Peak Value | | 2 Volts |
| Peak Heater-Cathode Voltage | | |
| Heater Negative with Respect to Cathode | | |
| During Warm-up Period Not to Exceed 15 seconds | 450 Volts | |
| After Equipment Warm-up Period | 140 Volts | |
| Heater Positive with Respect to Cathode | 140 Volts | |
| Peak Voltage Between Anode No. 2 and Any | | |
| Deflection Plate | 600 Volts | |

TYPICAL OPERATING CONDITIONS

| | |
|---|---|
| Anode No. 3 Voltage | 3000 Volts dc |
| Anode No. 2 Voltage | 1500 Volts dc |
| Anode No. 1 Voltage for Focus | 570 to 772 Volts dc |
| Grid No. 1 Voltage Required for Cutoff ¹ | -40 to -94 Volts dc |
| Deflection Factors | |
| Deflection Plates D1-D2 | 81 to 109 Volts dc/Inch |
| Deflecting Plates D3-D4 | 43 to 58 Volts dc/Inch |
| Spot Position ² | Within a 15 mm Square |
| Useful Scan | |
| D1-D2 | Full Screen Coverage |
| D3-D4 | 4 Inches — Centered with Respect to the tube face |

CIRCUIT VALUES

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

NOTES:

1. Visual extinction of the undeflected focused spot.
2. With the tube shielded and with all deflection plates connected to Anode No. 2. Limit square centered on tube face with the sides parallel to deflection axes.
3. It is recommended that the deflecting electrode circuit resistances be approximately equal.

OUTLINE

