CHARACTERISTICS

GENERAL DATA

Focusing Method ............................................ Electrostatic
Deflection Method ............................................ Magnetic
Deflection Angles (approx.)
  Horizontal ............................................ 85 Degrees
  Diagonal ............................................ 90 Degrees
Phosphor ................................................... Aluminized P4
Fluorescence ............................................... White
Persistency .................................................. Short to Medium
Faceplate .................................................... Gray Filter Glass
Light Transmittance (approx.) ......................... 70 Percent

ELECTRICAL DATA

Heater Voltage ................................................ 6.3 Volts
Heater Current .............................................. 0.6 ± 5% Ampere
Heater Warm-up Time ........................................ 11 Seconds
Direct Interelectrode Capacitances (approx.)
  Cathode to All Other Electrodes ......................... 5 μf
  Grid No. 1 to All Other Electrodes ....................... 6 μf
  External Conductive Coating to Anode σ .................. 2500 μf Max.
                                                      2000 μf Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions (Max. assured)
  Width ................................................... 21\frac{3}{16} \text{ Inches}
  Height ................................................ 16\frac{3}{8} \text{ Inches}
  Diagonal ............................................. 22\frac{13}{16} \text{ Inches}
Minimum Useful Screen Area ................................ 332 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap) ............. J1-21
Base ....................................................... 86-63
Basing ....................................................... 12L

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage ............................................ 22,000 Volts dc
Grid No. 4 Voltage (Focusing Electrode) .............. -550 to +1100 Volts dc
Grid No. 2 Voltage ........................................ 550 Volts dc
Grid No. 1 Voltage
  Negative Bias Value .................................. 155 Volts dc
  Negative Peak Value .................................. 220 Volts
  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 ................... 200 Volts
  Heater Positive with Respect to Cathode ........... 200 Volts

SYLVANIA ELECTRIC PRODUCTS INC.
TELEVISION PICTURE TUBE DIVISION
SENeca FALLS, NEW YORK
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JULY, 1957
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**TYPICAL OPERATING CONDITIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Anode Voltage</td>
<td>18,000 Volts</td>
</tr>
<tr>
<td>Grid No. 4 Voltage for Focus</td>
<td>-50 to +350 Volts</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>300 Volts</td>
</tr>
<tr>
<td>Grid No. 1 Voltage Required for Cutoff</td>
<td>-35 to -72 Volts</td>
</tr>
</tbody>
</table>

**CIRCUIT VALUES**

- Grid No. 1 Circuit Resistance: 1.5 Megohms Max.

**NOTES:**

1. **Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with E = 25 volts and series R = 31.5 ohms.**
2. **External conductive coating must be grounded.**
3. **Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.**

**WARNING:**

- X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.
**DIAGRAM NOTES:**

1. Reference line is determined by the plane C-C' of the reference line gauge (JETEC No. 116) when the gauge is resting on the glass cone. The neck diameter near the cone may exceed 1.500" but is limited by the internal contour of the yoke reference line gauge.

2. Useful screen area.

3. Anode contact aligns with pin No. 6 ±30 degrees.