CHARACTERISTICS

GENERAL DATA

Focusing Method ............................................ Electrostatic
Deflection Method .......................................... Magnetic
Deflection Angles (Approx.)
  Horizontal .............................................. 105 Degrees
  Diagonal .................................................. 110 Degrees
  Vertical .................................................. 87 Degrees
Phosphor ................................................... Aluminized P4
Fluorescence ................................................ White
Persistence .................................................. Short to Medium
Faceplate .................................................... Gray Filter Glass
Light Transmittance (Approx.) ......................... 78 Percent

ELECTRICAL DATA

Heater Voltage ............................................. 6.3 Volts
Heater Current ............................................. 0.6 Ampere
Heater Warm-up Time ..................................... 11 Seconds
Direct Interelectrode Capacitance (Approx.)
  Cathode to All Other Electrodes ....................... 5 μF
  Grid No. 1 to All Other Electrodes ................... 6 μF
  External Conductive Coating to Anode ............... 1500 μF Max.
                          ....................................... 1000 μF Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions
  (Maximum Assured) ..................................... 147/8 x 113/16 Inches
Minimum Useful Screen Area ........................... 155 Sq. Inches
Neck Length ............................................. 4 3/8 Inches
Overall Length .......................................... 11 1/4 Inches
Bulb ...................................................... J132 1/2 A or J132 1/2 B
Bulb Contact (Recessed Small Cavity Cap) .......... J1-21
Base .................................................... B7-208
  ....................................................... 8HR
Weight (Approx.) ......................................... 10 Pounds

RATINGS

MAXIMUM RATINGS (Design Maximum Values) 3

Anode Voltage ............................................. 18,000 Volts dc
Grid No. 4 Voltage
  (Focusing Electrode) ................................ -550 to +1100 Volts dc
Grid No. 2 Voltage ...................................... 550 Volts dc
Grid No. 1 Voltage ...................................... 154 Volts dc
Negative Bias Value .................................... 220 Volts dc
Negative Peak Value ................................... 0 Volts dc
Positive Bias Value .................................... 2 Volts dc
Positive Peak Value .................................... 2 Volts dc
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
ENGINEERING DATA SERVICE

QUICK REFERENCE DATA

Television Picture Tube
17" Direct Viewed
Rectangular Glass Type
Lightweight Tube
Spherical Faceplate
Gray Filter Glass
Aluminized Screen
Electrostatic Focus
110° Magnetic Deflection
4 1/2" Neck
No Ion Trap
External Conductive Coating

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

JULY, 1960

FILE UNDER
TELEVISION PICTURE TUBES
TYPICAL OPERATING CONDITIONS

Grid Drive Service

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage</td>
<td>14,000 Volts dc</td>
</tr>
<tr>
<td>Grid No. 4 Voltage for Focus</td>
<td>0 to 400 Volts dc</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>400 Volts dc</td>
</tr>
<tr>
<td>Grid No. 1 Voltage Required for Cutoff</td>
<td>-45 to -90 Volts dc</td>
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</tbody>
</table>

Cathode Drive Service

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage</td>
<td>14,000 Volts</td>
</tr>
<tr>
<td>Grid No. 4 Voltage for Focus</td>
<td>0 to 400 Volts</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>450 Volts</td>
</tr>
<tr>
<td>Cathode Voltage Required for Cutoff</td>
<td>+46 to +85 Volts</td>
</tr>
</tbody>
</table>

CIRCUIT VALUES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid No. 1 Circuit Resistance</td>
<td>1.5 Megohms Max.</td>
</tr>
</tbody>
</table>

NOTES:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.

2. External conductive coating must be grounded.

3. Voltages are positive with respect to cathode unless indicated otherwise.

4. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be increased about 3 volts.

5. Voltages are positive with respect to Grid No. 1 unless indicated otherwise.

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. Base Pin No. 4 aligns with anode contact (J1-21) within 30°.

2. Reference line is determined by plane C-C' of JEDEC No. 126 Reference Line Gauge, when the gauge is seated against the bulb.