CHARACTERISTICS

GENERAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focusing Method</td>
<td>Magnetic</td>
</tr>
<tr>
<td>Deflection Method</td>
<td>Magnetic</td>
</tr>
<tr>
<td>Deflection Angle (Approx.)</td>
<td>54 Degrees</td>
</tr>
<tr>
<td>Phosphor</td>
<td>Aluminized P4</td>
</tr>
<tr>
<td>Fluorescence</td>
<td>White</td>
</tr>
<tr>
<td>Persistence</td>
<td>Short to Medium</td>
</tr>
<tr>
<td>Faceplate</td>
<td>Gray Filter Glass</td>
</tr>
<tr>
<td>Transmittance (Approx.)</td>
<td>74 Percent</td>
</tr>
</tbody>
</table>

*In addition to the types shown, the 12KP-A can be supplied with several other screen phosphors.

ELECTRICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Voltage</td>
<td>6.3 Volts</td>
</tr>
<tr>
<td>Heater Current</td>
<td>0.6 ± 10% Ampere</td>
</tr>
<tr>
<td>Direct Interelectrode Capacitances (Approx.)</td>
<td></td>
</tr>
<tr>
<td>Cathode to All Other Electrodes</td>
<td>5 μF</td>
</tr>
<tr>
<td>Grid No. 1 to All Other Electrodes</td>
<td>6 μF</td>
</tr>
<tr>
<td>External Conductive Coating to Anode</td>
<td>2500 μF Max.</td>
</tr>
<tr>
<td></td>
<td>500 μF Min.</td>
</tr>
</tbody>
</table>

MECHANICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Useful Screen Diameter</td>
<td>11½ Inches</td>
</tr>
<tr>
<td>Bulb</td>
<td>J99 1/2A or J99 1/2B</td>
</tr>
<tr>
<td>Bulb Contact (Recessed Small Cavity Cap)</td>
<td>J1-21</td>
</tr>
<tr>
<td>Base (Small Shell Duodecal 3-Pin)</td>
<td>B5-57</td>
</tr>
<tr>
<td>Basing</td>
<td>12N</td>
</tr>
<tr>
<td>Weight (Approx.)</td>
<td>12½ Pounds</td>
</tr>
</tbody>
</table>

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage</td>
<td>13,200 Volts dc</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>450 Volts dc</td>
</tr>
<tr>
<td>Grid No. 1 Voltage</td>
<td></td>
</tr>
<tr>
<td>Negative Bias Value</td>
<td>140 Volts dc</td>
</tr>
<tr>
<td>Positive Bias Value</td>
<td>0 Volts dc</td>
</tr>
<tr>
<td>Positive Peak Value</td>
<td>2 Volts</td>
</tr>
<tr>
<td>Peak Heater-Cathode Voltage</td>
<td></td>
</tr>
<tr>
<td>Heater Negative with Respect to Cathode</td>
<td></td>
</tr>
<tr>
<td>During Warm-up Period Not to Exceed 15 Seconds</td>
<td>450 Volts</td>
</tr>
<tr>
<td>After Equipment Warm-up Period</td>
<td>154 Volts</td>
</tr>
<tr>
<td>Heater Positive with Respect to Cathode</td>
<td>154 Volts</td>
</tr>
</tbody>
</table>

TYPICAL OPERATING CONDITIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage</td>
<td>12,000 Volts dc</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>300 Volts dc</td>
</tr>
<tr>
<td>Grid No. 1 Voltage Required for Cutoff</td>
<td>~33 to ~77 Volts dc</td>
</tr>
<tr>
<td>Focusing Coil Current (Approx.)</td>
<td>135 Ma dc</td>
</tr>
<tr>
<td>Spot Position</td>
<td>See Note 5</td>
</tr>
</tbody>
</table>

CIRCUIT VALUES

<table>
<thead>
<tr>
<th>Feature</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. External conductive coating must be grounded.

2. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 9,000 volts.

3. Visual extinction of undeflected focused spot.

4. For JETEC Focusing Coil No. 106 positioned with center line of air gap 3\(\frac{1}{4}\) inches from reference line (See Outline Drawing). The indicated current is for condition with combined Grid No. 1 bias voltage and video signal voltage adjusted to produce a highlight brightness of 35 foot-lamberts on a 10\(\frac{1}{2}\)" x 7\(\frac{3}{4}\)" picture area, and sharply focused at the center of the screen.

5. The center of the undeflected, unfocused spot will fall within a circle having 20 mm radius concentric with the center of the tube face.

WARNING:

X-ray radiation shielding may be necessary to protect against 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 plane of upper edge of JETEC No. 112 reference line gauge, when the gauge is seated against the bulb.

2. Vacant pin position No. 3 aligns with anode contact cap (J1-21) within 30 degrees.