Double Triode

Mechanical Data

Coated unipotential cathode

Outline drawing ........................................ 6-2
Base ..................................................... T 6 1/2
Maximum diameter ........................................ 1 7/8"
Maximum overall length .................................. 2 3/16"
Maximum seated height .................................. 1 15/16"
Pin connections ...........................................

<table>
<thead>
<tr>
<th>Pin 1 - No. 2 Plate</th>
<th>Pin 5 - Heater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin 2 - No. 2 Grid</td>
<td>Pin 6 - No. 1 Plate</td>
</tr>
<tr>
<td>Pin 3 - No. 2 Cathode</td>
<td>Pin 7 - No. 1 Grid</td>
</tr>
<tr>
<td>Pin 4 - Heater</td>
<td>Pin 8 - No. 1 Cathode</td>
</tr>
<tr>
<td></td>
<td>Pin 9 - Heater center tap</td>
</tr>
</tbody>
</table>

Mounting position ...................................... Any

Electrical Data *

Direct interelectrode capacitances (approx.)

<table>
<thead>
<tr>
<th></th>
<th>No. 1 Triode</th>
<th>No. 2 Triode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate: (g to p)</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Input: g to (h + k)</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Output: p to (h + k)</td>
<td>2.0</td>
<td>0.40</td>
</tr>
</tbody>
</table>

△ External shield No. 315 connected to cathode of unit under test.

Heater characteristics

Heater voltage ......................................... 12.6/6.3 volts
Heater current ......................................... 150/300 ma
Maximum heater-cathode voltage

| Heater negative with respect to cathode: Total DC and peak | 200 volts |
| Heater positive with respect to cathode: DC Total DC and peak | 100 volts |

Ratings **

Class A1 amplifier

| Maximum plate voltage | 300 volts |
| Maximum plate dissipation | 2.75 watts |
| Each plate            | 5.2 watts |
| Both plates           | 20 ma     |
| Maximum cathode current | 0.25 megohm |
| Maximum grid circuit resistance | 1.0 megohm |

* All ratings and operating conditions and characteristics are for each unit except where otherwise stated.

** All values are evaluated on design center system except where absolute maximum is stated.
Typical operating conditions and characteristics, class A1 amplifier

Plate voltage .............................................. 100 250 volts
Grid voltage ............................................... 0  -8.5 volts
Plate current ............................................ 11.8 10.5 ma
Plate resistance (approx.) ............................. 6500 7700 ohms
Transconductance ...................................... 3100 2200 µhos
Amplification factor ................................. 20 17
Grid voltage (approx.) for Ib = 10 µa .............. -24 volts

Ratings ** Vertical Deflection Oscillator §

Maximum DC plate voltage ......................... 300 volts
Maximum plate dissipation
  Each plate .............................................. 2.75 watts
  Both plates .......................................... 5.5 watts
Maximum peak negative grid voltage ........... 400 volts
Maximum average cathode current .............. 20 ma
Maximum peak cathode current .................. 60 ma
Maximum grid circuit resistance ............... 2.2 megohms

Ratings ** Horizontal Deflection Oscillator §

Maximum DC plate voltage ......................... 300 volts
Maximum plate dissipation
  Each plate .............................................. 2.75 watts
  Both plates .......................................... 5.5 watts
Maximum peak negative grid voltage ........... 600 volts
Maximum average cathode current .............. 20 ma
Maximum peak cathode current .................. 300 ma
Maximum grid circuit resistance ............... 2.2 megohms

Ratings ** Vertical Deflection Amplifier §

Maximum DC plate voltage ......................... 300 volts
Maximum peak positive plate voltage (absolute maximum) ... 1200 volts
Maximum plate dissipation §§
  Each plate .............................................. 2.75 watts
  Both plates .......................................... 5.5 watts
Maximum peak negative grid voltage ........... 250 volts
Maximum average cathode current .............. 20 ma
Maximum peak cathode current .................. 60 ma
Maximum grid circuit resistance (cathode bias) .... 2.2 megohms

** All values are evaluated on design center system except where absolute maximum is stated.

§ For operation in a 525 line, 30-frame system as described in "Standards of Good Engineering Practice for Television Broadcasting Stations; Federal Communications Commission." The duty cycle of the voltage pulse not to exceed 15% of a scanning cycle.

§§ In Stages operating with grid-leak bias, an adequate cathode bias resistor or other suitable means is required to protect the tube in the absence of excitation.

Refer to "Interpretation of Receiving Tube Ratings"