MECHANICAL DATA

Bulb ........................................ T-5 ½
Base ........................................ E7-1, Miniature Button 7-Pin
Outline ...................................... 5-3
Basing ....................................... 7CV
Cathode ...................................... Coated Unipotential
Mounting Position ......................... Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ..................... 25.0 Volts
Heater Current ..................... 150 Ma
Heater-Cathode Voltage
(Design Center Values)
Heater Negative with Respect to Cathode
Total DC and Peak .................. 200 Volts Max.
Heater Positive with Respect to Cathode
DC ........................................ 100 Volts Max.
Total DC and Peak .................. 200 Volts Max.

DIRECT INTERELECTRODE CAPACITANCE (Unshielded)

Grid to Plate ......................... 0.57 μF
Input .................................. 12.0 μF
Output .................................. 6.0 μF

RATINGS (Design Center Values)

Plate Voltage .................... 135 Volts Max.
Grid No. 2 Voltage ............ 117 Volts Max.
Plate Dissipation ................. 4.5 Watts Max.
Grid No. 2 Dissipation .......... 1.0 Watt Max.
Grid No. 1 Circuit Resistance
Fixed Bias ........................... 0.1 Megohm Max.
Cathode Bias ....................... 0.5 Megohm Max.

CHARACTERISTICS AND TYPICAL OPERATION (Single Tube)

Class A1 Amplifier

Plate Voltage ..................... 110 Volts
Grid No. 2 Voltage ............ 110 Volts
Grid No. 1 Voltage ............ -7.5 Volts
Peak AF Grid No. 1 Voltage .... 7.5 Volts
Zero Signal Plate Current ........ 36 Ma
Maximum Signal Plate Current .... 37 Ma
Zero Signal Grid No. 2 Current .... 3.0 Ma
Maximum Signal Grid No. 2 Current .... 7.0 Ma
Plate Resistance (approx.) ... 160000 Ohms
Transconductance .............. 5800 μmhos
Load Resistance ................ 2500 Ohms
Maximum Signal Power Output .... 1.2 Watts
Total Harmonic Distortion (approx.) 10 Percent
Class A1 Amplifier (two tubes in push-pull)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>110 Volts</td>
</tr>
<tr>
<td>Grid No. 2 Voltage</td>
<td>110 Volts</td>
</tr>
<tr>
<td>Grid No. 1 Voltage</td>
<td>-8.0 Volts</td>
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<tr>
<td>Peak AF Grid to Grid Voltage</td>
<td>16 Volts</td>
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<tr>
<td>Zero Signal Plate Current</td>
<td>70 Ma</td>
</tr>
<tr>
<td>Maximum Signal Plate Current</td>
<td>78 Ma</td>
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<tr>
<td>Zero Signal Grid No. 2 Current</td>
<td>7.5 Ma</td>
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<tr>
<td>Maximum Signal Grid No. 2 Current</td>
<td>13.6 Ma</td>
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<tr>
<td>Load Resistance</td>
<td>4500 Ohms</td>
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<tr>
<td>Maximum Signal Power Output</td>
<td>2.9 Watts</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>2.6 Percent</td>
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</tbody>
</table>
AVERAGE PLATE CHARACTERISTICS

$E_f = \text{RATED VALUE}$

$E_{C2} = 110 \text{ VOLTS}$
AVERAGE PLATE CHARACTERISTICS

CURRENT IN MA

PLATE VOLTAGE

E1 = RATED VALUE
E2 = 110 VOLTS
AVERAGE PLATE CHARACTERISTICS
(TRIODE CONNECTED)