POWER AMPLIFIER TRIODE

GENERAL DATA

Electrical:

Filament, Thoriated Tungsten:
Voltage: 7.5 ac or dc volts
Current: 1.25 amp
Amplification Factor: 8
Direct Inter-electrode Capacitances (Approx.):
Grid to Plate: 7 μμf
Grid to Filament: 4 μμf
Plate to Filament: 3 μμf

Mechanical:

Mounting Position: Vertical, base down
Maximum Overall Length: 5-3/8"
Maximum Seated Length: 4-3/4"
Maximum Diameter: 2-1/16"
Bulb: ST-16
Base: Medium-Shell Small 4-Pin Micano, Bayonet
Basing Designation for BOTTOM VIEW: 4D

Pin 1—Filament
Pin 2—Plate
Pin 3—Grid
Pin 4—Filament

PLATE-MODULATED RF POWER AMPLIFIER—Class C Telephony

Carrier conditions per tube for use with a max. modulation factor of 1.0

Maximum Ratings, Absolute Values:

DC PLATE VOLTAGE: 350 max. volts
DC GRID VOLTAGE: -200 max. volts
DC PLATE CURRENT: 60 max. ma.
DC GRID CURRENT: 15 max. ma.
PLATE INPUT: 17.5 max. watts
PLATE DISSIPATION: 10 max. watts

Typical Operation:

DC Plate Voltage: 250 350 volts
DC Grid Voltage: -95 -135 volts
Peak RF Grid Voltage: 195 235 volts
DC Plate Current: 45 45 ma.
DC Grid Current (Approx.): 15 15 ma.
Driving Power (Approx.): 3 3.5 watts
Power Output (Approx.): 5.5 8 watts

Subject to wide variations as explained on sheet TUBE RATINGS in General Section.
### RF POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

*Key-down conditions per tube without modulation*

#### Maximum Ratings, Absolute Values:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC PLATE VOLTAGE</td>
<td>450 max. volts</td>
</tr>
<tr>
<td>DC GRID VOLTAGE</td>
<td>-200 max. volts</td>
</tr>
<tr>
<td>DC PLATE CURRENT</td>
<td>60 max. ma.</td>
</tr>
<tr>
<td>DC GRID CURRENT</td>
<td>15 max. ma.</td>
</tr>
<tr>
<td>PLATE INPUT</td>
<td>27 max. watts</td>
</tr>
<tr>
<td>PLATE DISSIPATION</td>
<td>15 max. watts</td>
</tr>
</tbody>
</table>

#### Typical Operation:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Plate Voltage</td>
<td>350 450 .. volts</td>
</tr>
<tr>
<td>DC Grid Voltage</td>
<td>-90 -115 .. volts</td>
</tr>
<tr>
<td>Peak RF Grid Voltage</td>
<td>190 215 .. volts</td>
</tr>
<tr>
<td>DC Plate Current</td>
<td>55 55 .. ma.</td>
</tr>
<tr>
<td>DC Grid Current (Approx.)</td>
<td>15 15 .. ma.</td>
</tr>
<tr>
<td>Driving Power (Approx.)</td>
<td>3 3.3 .. watts</td>
</tr>
<tr>
<td>Power Output (Approx.)</td>
<td>9 13 .. watts</td>
</tr>
</tbody>
</table>

Subject to wide variations as explained on sheet TUBE RATINGS in General Section.

Modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.

Data on operating frequencies for the 10-Y are given on the sheet TRANS. TUBE RATINGS vs FREQUENCY

DEC. 20, 1946