GENERAL DATA

Electrical:

Filament, Coated:
- Voltage: 2.5 ac or dc volts
- Current: 2.5 amp

Direct Inter-electrode Capacitances (Approx.):
- Grid to Plate: 16.5 μμf
- Grid to Cathode: 7.5 μμf
- Plate to Cathode: 5.5 μμf

*With no external shield.

Mechanical:

Mounting Position: Any
Maximum Overall Length: 5-3/8" 4-3/4" 2-1/16"
Maximum Seated Length: ST-16
Maximum Diameter: Medium-Small Shell 4-Pin
Basing Designation for BOTTOM VIEW: 4D

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

AMPLIFIER - Class A

Maximum Ratings, Design-Center Values:
- PLATE VOLTAGE: 300 max. volts
- PLATE DISSIPATION: 15 max. watts

Typical Operation and Characteristics:
- Plate Voltage: 250 volts
- Grid Voltage: -45 volts
- Amplification Factor: 4.2
- Plate Resistance: 800 ohms
- Transconductance: 5250 μmhos
- Plate Current: 60 ma.
- Load Resistance: 2500 ohms
- Second Harmonic Distortion: 5%
- Power Output: 3.5 watts

Maximum Circuit Values:

Grid-Circuit Resistance:
- fixed bias: 0.05 max. megohm
- cathode bias: 0.5 max. megohm

#, A, D: See next page.
< indicates a change.

OCTOBER 15, 1947
TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
DATA
PUSH-PULL AMPLIFIER - Class AB₁

Maximum Ratings, Design-Center Values:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>300 max. volts</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>Plate Voltage</td>
<td>300 300 volts</td>
</tr>
<tr>
<td>Grid Voltage#</td>
<td>-62 volts</td>
</tr>
<tr>
<td>Cathode-Bias Resistor</td>
<td>780 ohms</td>
</tr>
<tr>
<td>Peak AF Grid-to-Grid Voltage</td>
<td>124 156 volts</td>
</tr>
<tr>
<td>Zero-Signal Plate Current</td>
<td>80 80 ma</td>
</tr>
<tr>
<td>Max.-Signal Plate Current</td>
<td>147 100 ma</td>
</tr>
<tr>
<td>Effective Load Resistance (plate to plate)</td>
<td>3000 5000 ohms</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>2.5 5.0 %</td>
</tr>
<tr>
<td>Power Output</td>
<td>15 10 watts</td>
</tr>
</tbody>
</table>

Maximum Circuit Values:

Grid-Circuit Resistance.

\[\text{fixed bias 0.05 max. megohm} \]
\[\text{cathode bias 0.5 max. megohm} \]

* Grid voltage referred to mid-point of ac-operated filament.
* When a single 2A3 is operated cathode-biased, the cathode-biasing resistor value should be 750 ohms.
* The type of coupling used should not introduce too much resistance in the grid circuit. Transformer or impedance-coupling devices are recommended.
* For zero-signal conditions.

AVERAGE CHARACTERISTICS

<table>
<thead>
<tr>
<th>TYPE 2A3</th>
<th>(E_f = 2.5) VOLTS DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF</td>
<td>200 300 400 500</td>
</tr>
<tr>
<td>PLATE VOLTS</td>
<td>0 100 200 400</td>
</tr>
<tr>
<td>MILLIAMPERES</td>
<td>80 120 160 200</td>
</tr>
</tbody>
</table>

92CM-532BT

Indicates a change.

OCTOBER 15, 1947

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
AVERAGE PLATE CHARACTERISTICS

$E_t = 2.5$ VOLTS D.C.

PLATE VOLTS

PLATE MILLIAMPERES

MARCH 9, 1933

RCA RADIOotron DIVISION
RCA MANUFACTURING COMPANY, INC.

925-5233R1
AVERAGE CHARACTERISTICS

$E_f = 2.5$ VOLTS D.C.

AMPLIFIER FACTOR ($A$)

Plate Resistance (TP) Ohms

Plate Volts

GRID RESISTANCE (OHMS)

MUTUAL CONDUCTANCE ($G_{m}$) MICROHMS

JUNE 12, 1933
RCA RADIotron DIVISIoN
RCA MANUFACTURING COMPANY, INC.

925-5326R1