Dual Triode
With Medium-Mu Unit and Low-Mu Unit

NEOMOVAL TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathodes:
Voltage (AC or DC) ................... 6.3 ± 10% volts
Current at 6.3 volts ................... 0.9 amp
Direct Interelectrode Capacitances (Approx.):

<table>
<thead>
<tr>
<th>Unit No.1</th>
<th>Unit No.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate</td>
<td>4.2</td>
</tr>
<tr>
<td>Grid to cathode and heater</td>
<td>2.2</td>
</tr>
<tr>
<td>Plate to cathode and heater</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Characteristics, Class A Amplifier:

<table>
<thead>
<tr>
<th>Unit No.1</th>
<th>Unit No.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate Voltage</td>
<td>250</td>
</tr>
<tr>
<td>Grid Voltage</td>
<td>-11</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>17.5</td>
</tr>
<tr>
<td>Plate Resistance (Approx.)</td>
<td>8750</td>
</tr>
<tr>
<td>Transconductance</td>
<td>2000</td>
</tr>
<tr>
<td>Plate Current</td>
<td>5.5</td>
</tr>
<tr>
<td>Plate Current for plate volts = 60 and grid volts = 0</td>
<td>-</td>
</tr>
<tr>
<td>Plate Current for grid volts = -25</td>
<td>-</td>
</tr>
<tr>
<td>Grid Voltage (Approx.) for plate µu = 10</td>
<td>-20</td>
</tr>
<tr>
<td>Grid Voltage (Approx.) for plate µu = 100</td>
<td>-</td>
</tr>
</tbody>
</table>

Mechanical:
Operating Position ....................... Any
Maximum Overall Length ................... 2.93"
Maximum Seated Length ................... 2.62"
Length, Base Seat to Bulb Top (Excluding tip) 2.07" to 2.31"
Diameter .......................... 1.062" to 1.188"
Bulb ....................... T9
Base .................. Large-Button Neonoval 9-Pin (JEDEC No.E9-68)
Basing Designation for BOTTOM VIEW .......................... 9HF

Pin 1 - Plate of Unit No.2
Pin 2 - Grid of Unit No.2
Pin 3 - Grid of Unit No.2
Pin 4 - Heater
Pin 5 - Heater

Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Cathode of Unit No.2
VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system\(^a\)

- DC PLATE VOLTAGE: \(330 \text{ max. volts}\)
- PEAK NEGATIVE-PULSE GRID VOLTAGE: \(400 \text{ max. volts}\)

CATHODE CURRENT:

- Peak: \(77 \text{ max. ma}\)
- Average: \(22 \text{ max. ma}\)

- PLATE DISSIPATION: \(1.5 \text{ max. watts}\)

PEAK HEATER-CATHODE VOLTAGE:

- Heater negative with respect to cathode: \(200 \text{ max. volts}\)
- Heater positive with respect to cathode: \(200^c \text{ max. volts}\)

Maximum Circuit Values:

- Grid-Circuit Resistance:
  - For grid-resistor-bias or cathode-bias operation: \(2.2 \text{ max. megohms}\)


VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system\(^b\)

- DC PLATE VOLTAGE: \(330 \text{ max. volts}\)
- PEAK POSITIVE-PULSE PLATE VOLTAGE\(^d\): \(1500 \text{ max. volts}\)
- PEAK NEGATIVE-PULSE GRID VOLTAGE: \(250 \text{ max. volts}\)

CATHODE CURRENT:

- Peak: \(175 \text{ max. ma}\)
- Average: \(50 \text{ max. ma}\)

- PLATE DISSIPATION: \(10 \text{ max. watts}\)

PEAK HEATER-CATHODE VOLTAGE:

- Heater negative with respect to cathode: \(200 \text{ max. volts}\)
- Heater positive with respect to cathode: \(200^c \text{ max. volts}\)

Maximum Circuit Values:

- Grid-Circuit Resistance:
  - For grid-resistor-bias or cathode-bias operation: \(2.2 \text{ max. megohms}\)

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\(^a\) Without external shield.

\(^b\) As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

\(^c\) The dc component must not exceed 100 volts.

\(^d\) This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.
* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600" INTERNAL DIAMETER.

** APPLIES IN ZONE STARTING 0.375" FROM BASE SEAT.
AVERAGE CHARACTERISTICS

Unit No.2

$E_t = 6.3$ VOLTS

AMPLIFICATION FACTOR (μ)

TRANSCONDUCTANCE (gm) — MICROMHOS

PLATE RESISTANCE ($r_p$) — OHMS

GRID VOLTS

-60 -50 -40 -30 -20 -10 0

4500 4000 3500 3000 2500 2000 1500 1000 500 0

92CM—11113

RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA 4
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