Dual Triode

With High-Mu Unit and Low-Mu Unit

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (Design-Maximum Values):
Voltage (AC or DC) .................. 6.3 ± 0.6 volts
Current at heater volts = 6.3 ........ 0.925 amp
Peak heater-cathode voltage (Each unit):
Heater negative with
respect to cathode ............. 200 max. volts
Heater positive with
respect to cathode ............. 200 max. volts
Direct Interelectrode Capacitances (Approx.):b

<table>
<thead>
<tr>
<th>Unit No. 1</th>
<th>Unit No. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate</td>
<td>4.5</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 AJ 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>-3</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>64</td>
</tr>
<tr>
<td>Plate Resistance (Approx.)</td>
<td>40000</td>
</tr>
<tr>
<td>Transconductance</td>
<td>1600</td>
</tr>
<tr>
<td>Plate Current</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Grid Voltage (Approx.) for plate μa =
10 ................................ -5.5 - - volts
100. ................................ - - -40 volts
Transconductance for plate ma = 1. .................. - - 500 μμhos
Plate Current for grid volts = -25. ........................ - - 6 ma

Mechanical:

Operating Position ................................... Any
Type of Cathodes .................................... Coated Unipotential
Maximum Overall Length ................................ 2.900"
Maximum Seated Length ................................ 2.620"
Length, Base Seat to Bulb Top (Excluding tip) 2.070" to 2.310"
Diameter ............................................. 1.062" to 1.188"
Bulb .................................................. T9
Base ............................................... JEDEC No.E9-82
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:

DC PLATE VOLTAGE: 330 max. volts
PEAK NEGATIVE-PULSE GRID VOLTAGE: 400 max. volts

CATHODE CURRENT:
Peak: 70 max. ma
Average: 20 max. ma

PLATE DISSIPATION: 1.5 max. watts

Maximum Circuit Values:

Grid-Circuit Resistance:
For grid-resistor-bias or cathode-bias operation: 2.2 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:

DC PLATE VOLTAGE: 330 max. volts
PEAK POSITIVE-PULSE PLATE VOLTAGE: 1500 max. volts
PEAK NEGATIVE-PULSE GRID VOLTAGE: 250 max. volts

CATHODE CURRENT:
Peak: 175 max. ma
Average: 50 max. ma

PLATE DISSIPATION: 10 max. watts

Maximum Circuit Values:

Grid-Circuit Resistance:
For grid-resistor-bias or cathode-bias operation: 2.2 max. megohms

a The dc component must not exceed 100 volts.
b Without external shield.
c This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded
d As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
e This rating is applicable when 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.
** APPLIES IN ZONE STARTING 0.625" FROM BASE SEAT.

* MEASURED FROM BASE SEAT TO BULB-TOP LINE AS DETERMINED BY A RING GAUGE OF 0.600" INSIDE DIAMETER.