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

GENERAL DATA

Electrical:
Heater Characteristics and Ratings:
Voltage (AC or DC) .................. 6.3 ± 0.6 volts
Current at heater volts = 6.3. ........ 1.05 amp
Peak heater–cathode voltage (Each unit):
Heater negative with respect to cathode ........ 200 max. volts
Heater positive with respect to cathode .......... 200 a 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>4.0</td>
</tr>
<tr>
<td>Grid to cathode and heater</td>
<td>2.2</td>
</tr>
<tr>
<td>Plate to cathode and heater</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Characteristics, Class A 1 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 c</td>
</tr>
<tr>
<td>Amplification Factor</td>
<td>66</td>
</tr>
<tr>
<td>Plate Resistance (Approx.)</td>
<td>30000</td>
</tr>
<tr>
<td>Transconductance</td>
<td>2200</td>
</tr>
<tr>
<td>Plate Current</td>
<td>2</td>
</tr>
</tbody>
</table>

Grid Voltage (Approx.) for plate μa =
20 .......... -5.3 | - | - | - | volts |
200 .......... - | - | - | -60 volts |

Mechanical:
Operating Position ................................... Any
Type of Cathodes .................................... Coated Unipotential
Maximum Overall Length ............................ 3 "
Maximum Seated Length ............................. 2-7/16 "
Maximum Diameter .................................. 1-9/32 "
Bulb .................................................. T9
Base .................................................. Intermediate–Shell Octal 8-Pin, (JEDEC Group 1, No.88-6)

Basing Designation for BOTTOM VIEW .......... 8BD

Pin 1–Grid of Unit No. 2
Pin 2–Plate of Unit No. 2
Pin 3–Cathode of Unit No. 2
Pin 4–Grid of Unit No. 1

Pin 5–Plate of Unit No. 1
Pin 6–Cathode of Unit No. 1
Pin 7–Heater
Pin 8–Heater
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 ........................................... 350 max. volts
PEAK NEGATIVE-PULSE GRID VOLTAGE ........ 400 max. volts
PLATE DISSIPATION ............................................. 1 max. watt

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation .................................. 1 max. megohm
For 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 ........................................... 550 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 ............................................. 100 max. watts

Maximum Circuit Values:

Grid-Circuit Resistance:

For fixed-bias operation .................................. 1 max. megohm
For cathode-bias operation .......................... 2.2 max. megohms

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a The dc component must not exceed 100 volts.

b Without external shield.

c Adjusted for plate ma.=13.

d Applied for short interval (two seconds maximum) so as not to damage tube.

e As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

f 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 milli-

seconds.

g In stages operating with grid-leak bias, an adequate cathode-bias resis-
tor or other suitable means is required to protect the tube in the ab-

sence of excitation.
ALL DIMENSIONS IN INCHES