6BK7-A
MEDIUM-MU TWIN TRIODE
9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathodes:
Voltage .............. 6.3 ............ ac or dc volts
Current ............. 0.45 .............. amp
Direct Interelectrode Capacitances:

<table>
<thead>
<tr>
<th>Unit No.1</th>
<th>Unit No.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid to plate</td>
<td>1.8</td>
</tr>
<tr>
<td>Grid to cathode, internal shield, and heater</td>
<td>3</td>
</tr>
<tr>
<td>Plate to cathode, internal shield, and heater</td>
<td>1</td>
</tr>
<tr>
<td>Heater to cathode</td>
<td>2.8</td>
</tr>
<tr>
<td>Plate to cathode</td>
<td>0.22</td>
</tr>
<tr>
<td>Cathode to grid, internal shield, and heater</td>
<td>6</td>
</tr>
<tr>
<td>Plate to grid, internal shield, and heater</td>
<td>2.4</td>
</tr>
<tr>
<td>Grid of unit No.1 to grid of unit No.2</td>
<td>0.004 max.</td>
</tr>
<tr>
<td>Plate of unit No.1 to plate of unit No.2</td>
<td>0.075 max.</td>
</tr>
</tbody>
</table>

Characteristics, Class A Amplifier (Each Unit):
Plate-Supply Voltage ............. 150 volts
Cathode Resistor .............. 56 ohms
Amplification Factor ............. 43
Plate Resistance (Approx.) ......... 4600 ohms
Transconductance ............. 9300 µmhos
Plate Current ............. 18 ma
Grid Volts (Approx.) for plate current of 10 µamp ............. -11 volts

Mechanical:
Mounting Position ............. Any
Maximum Overall Length ............. 2-3/16"
Maximum Seated Length ............. 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip) ............. 1-9/16" ± 3/32"
Maximum Diameter ............. 7/8"
Dimensional Outline ............. See General Section
Bulb ............. T6-1/2
Base ............. Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW ............. 9AJ

Pin 1-Plate of Unit No.2
Pin 2-Grid of Unit No.2
Pin 3-Cathode 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-Internal Shield

Without external shield.

2-57
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
AMPLIFIER - Class A1

Values are for Each Unit

Maximum Ratings, Design-Center Values:

- PLATE VOLTAGE: 300 max. volts
- GRID VOLTAGE:
  - Negative bias value: 50 max. volts
- PLATE DISSIPATION: 2.7 max. watts
- PEAK HEATER-CATHODE VOLTAGE:
  - Heater negative with respect to cathode: 200\textsuperscript{\dagger} max. volts
  - Heater positive with respect to cathode: 200\textsuperscript{\ddagger} max. volts

\textsuperscript{\dagger} Under cutoff conditions in cascode-type circuits with direct-coupled drive, it is permissible for this voltage to be as high as 300 volts.

\textsuperscript{\ddagger} The dc component must not exceed 100 volts.