6662/6BJ6
REMOTE-CUTOFF PENTODE
7-PIN MINIATURE TYPE
For use in mobile communications equipment

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage: \(6.3 \pm 20\%\) ac or dc volts
Current at 6.3 volts: 0.15 amp
Direct Interelectrode Capacitances:

<table>
<thead>
<tr>
<th>Without External Shield</th>
<th>With External Shield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid No. 1 to plate</td>
<td>0.0035 max.</td>
</tr>
<tr>
<td>Grid No. 1 to cathode, grid No. 3 &amp; internal shield, grid No. 2, and heater</td>
<td>4.5 μuf</td>
</tr>
<tr>
<td>Plate to cathode, grid No. 3 &amp; internal shield, grid No. 2, and heater</td>
<td>5.5 μuf</td>
</tr>
</tbody>
</table>

Characteristics, Class A\(_1\) Amplifier:
Heater Voltage: 6.3 volts
Plate Supply Voltage: 100 volts
Grid No. 3: Connected to cathode at socket
Grid-No. 2 Supply Voltage: 100 volts
Cathode Resistor: 80 ohms
Plate Resistance (Approx.): 0.25 1.3 megalohms
Transconductance: 3650 3600 μhos
Plate Current: 9 9.2 ma
Grid-No. 2 Current: 3.5 3.3 ma
Grid-No. 1 Voltage (Approx.) for transconductance = 10 μhos: -20 20 volts

Mechanical:
Operating Position: Any
Maximum Overall Length: 2-1/8" 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip): 1-1/2" ± 3/32"
Diameter: 0.650" to 0.750"
Dimensional Outline: See General Section
Bulb: T5-1/2
Base: Small-Button Miniature 7-Pin (JEDEC No. E7-1)
Basing Designation for BOTTOM VIEW: 7CM

Pin 1—Grid No. 1
Pin 2—Cathode
Pin 3—Heater
Pin 4—Heater
Pin 5—Plate

Pin 6—Grid No. 2
Pin 7—Grid No. 3
Internal Shield

8-59
ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
## AMPLIFIER — Class A₁

### Maximum Ratings, Design-Maximum Values:

- **PLATE VOLTAGE**: 330 max. volts
- **GRID-No. 2 (SCREEN-GRID) SUPPLY VOLTAGE**: 330 max. volts
- **GRID-No. 2 VOLTAGE**: See Grid-No. 2 Input Rating Chart at front of Receiving Tube Section
- **GRID-No. 1 (CONTROL-GRID) VOLTAGE:**
  - Negative-bias value: 55 max. volts
  - Positive-bias value: 0 max. volts
- **GRID-No. 2 INPUT:**
  - For grid-No. 2 voltages up to 165 volts: 0.65 max. watt
  - For grid-No. 2 voltages between 165 and 330 volts: See Grid-No. 2 Input Rating Chart at front of Receiving Tube Section
- **PLATE DISSIPATION**: 3.3 max. watts
- **PEAK HEATER-CATHODE VOLTAGE:**
  - Heater negative with respect to cathode: 100 max. volts
  - Heater positive with respect to cathode: 100 max. volts

*When the heater is operated from storage-battery-with-charger supply or similar supplies, the normal battery-voltage fluctuation may be as much as 35 per cent or more. Although such variation in heater voltage is permissible for short periods, reliability can be increased with improved supply-voltage regulation.

*With external shield JEDEC No. 316 connected to cathode.

### SPECIAL RATINGS & PERFORMANCE DATA

#### Heater-Cycling Life Performance:

This test is performed on a sample lot of tubes from each production run. A minimum of 2000 cycles of intermittent operation is applied under the following conditions: heater volts = 7.5 cycled one minute on and one minute off, heater 135 volts positive with respect to cathode, and all other elements connected to ground. At the end of this test, tubes are checked for heater-cathode shorts and open circuits.

#### Transconductance at Reduced Heater Voltage:

- **Average Value**: 2900 µmhos

  With heater volts = 5, plate supply volts = 250, grid No. 3 connected to cathode at socket, grid-No. 2 supply volts = 100, and cathode resistor (ohms) bypassed = 80.