SPONSOR: Philco Radio and Television Corporation

TYPE CLASSIFICATION: Beam Power Amplifier

PHYSICAL SPECIFICATIONS:

TYPE CATHODE: Unipotential

PIN CONNECTIONS:

Pin 1 - Screen Grid
" 2 - Heater
" 4 - Plate
" 6 - Control Grid
" 7 - Heater
2 8 - Cathode and Beam Plates

(Pins #3 and 5 removed)

BASE DESIGNATION: 6AP

TYPE OF BASE: Medium Octal 6-pin (special)

MAX. DIAMETER: 2-1/16"

MAX. OVERALL LENGTH: 5-5/16"

MAX. SEATED HEIGHT: 4-3/4"

MOUNTING POSITION: Any

RATINGS:

Heater Voltage AC or DC 6.3 volts
Heater Current .9 amp.
Max. Plate Voltage DC 350 volts
Max. Screen Voltage DC 250 volts
Max. Plate Dissipation 18.5 watts
Max. Peak Plate Voltage volts
Max. Screen Dissipation 2.7 watts

TYPICAL OPERATION:

BEAM TETRODE
CLASS A1
TRIODE CLASS A1
SCREEN TO PLATE

Heater Voltage 6.3
Plate Voltage 350
Screen Voltage 250
Grid Voltage -18
Peak AP Signal 18
Transconductance 5,200
Amplification Factor -
Plate Resistance 33,000

6.3 volts
250 volts
-20 volts
20 volts
4,700 umhos
8.0
1,700 ohms
**TYPICAL OPERATION - Cont.**

<table>
<thead>
<tr>
<th></th>
<th>Beam Tetrode</th>
<th>TRIODE CLASS A1</th>
<th>Screen To Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Signal Plate Current</td>
<td>5.4</td>
<td></td>
<td>4.0 ma.</td>
</tr>
<tr>
<td>Zero Signal Screen Current</td>
<td>2.5</td>
<td></td>
<td>- ma.</td>
</tr>
<tr>
<td>Max. Signal Plate Current</td>
<td>6.6</td>
<td></td>
<td>4.4 ma.</td>
</tr>
<tr>
<td>Max. Signal Screen Current</td>
<td>7.0</td>
<td></td>
<td>- ma.</td>
</tr>
<tr>
<td>Load Resistance</td>
<td>4,200</td>
<td>5,000 ohms</td>
<td></td>
</tr>
<tr>
<td>Power Output</td>
<td>10.8</td>
<td>1.4 watts</td>
<td></td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>15</td>
<td></td>
<td>5 %</td>
</tr>
</tbody>
</table>

**COMMENTS:**

Electrical characteristics are identical with Type 6L6G. The stem and basting of Type 6AH5G have been arranged to obtain a high breakdown-voltage between plate and other elements for use in television circuits.