POWER AMPLIFIER PENTODE

Heater
Coated Unipotential Cathode
Voltage 6.3 a-c or d-c volts
Current 0.15 amp.

Direct Interelectrode Capacitances (Approx.):°
Grid to Plate 0.5 μf
Input 5.5 μf
Output 7.0 μf

Maximum Overall Length 4-1/8"
Maximum Seated Height 3-9/16"
Maximum Diameter 1-9/16"
Bulb ST-12
Base Small Shell Octal 7-Pin
Pin 1-No Connection Pin 5-Grid
Pin 2-Heater Pin 7-Heater
Pin 3-Plate Pin 8-Cathode
Pin 4-Screen
Mounting Position BOTTOM VIEW (G-7S) Any

Maximum Ratings Are Design-Center Values

AMPLIFIER — Pentode Connection

Plate Voltage 300 max. volts
Screen Voltage 300 max. volts
Plate Dissipation 2.75 max. watts
Screen Dissipation 0.75 max. watt
D-C Heater-Cathode Potential 90 max. volts

Typical Operation and Characteristics — Class A1 Amplifier:
Plate Voltage 135 180 volts
Screen Voltage 135 180 volts
Grid Voltage* -6 -9 volts
Peak A-F Grid Voltage 6 9 volts
Zero-Sig. Plate Cur. 11.5 15 ma.
Zero-Sig. Screen Cur. 2 2.5 ma.
Plate Resistance 0.170 0.175 megohm
Transconductance 2100 2300 μmhos
Load Resistance 12000 10000 ohms
Total Harmonic Dist. 7.5 10 %
Max.-Sig. Power Output 0.6 1.1 watts

AMPLIFIER — Triode Connection

Plate Voltage 300 max. volts
Plate Dissipation 3.5 max. watts
D-C Heater-Cathode Potential 90 max. volts

Typical Operation and Characteristics — Class A1 Amplifier:
Plate Voltage 180 volts
Grid Voltage* -12 volts
Peak A-F Grid Voltage 12 volts
Amplification Factor 9.5
Plate Resistance 4750 ohms
Transconductance 2000 μmhos
Plate Current 11 ma.

* Indicates a change.
°, †, ‡: See next page.
### POWER AMPLIFIER PENTODE

(continued from preceding page)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
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<tr>
<td>Load Resistance</td>
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<tr>
<td>Total Harmonic Distortion</td>
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<td>%</td>
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<tr>
<td>Max.-Sig. Power Output</td>
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<td>watt</td>
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○ With no external shield.
* Under maximum rated conditions, the d-c resistance in the grid circuit may be as high as 0.5 megohm with cathode bias or 0.1 megohm with fixed bias.
▲ With screen connected to plate.
6G6-G

AVERAGE PLATE CHARACTERISTICS
TRIODE CONNECTION

$E_f = 6.3$ VOLTS  GRID No.2 CONNECTED TO PLATE

PLATE MILLIAMPERES

AUG. 12, 1943
RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6122R1
E_f = 6.3 VOLTS  SCREEN VOLTS = 180

PLATE (I_b) OR SCREEN (I_c2) MILLIAMPERES

AUG. 19, 1943  RCA VICTOR DIVISION  92CM-4956R1