TUNG-SOL

TWIN TRIODE AMPLIFIERS

COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.8 AMPERE
AC OR DC

METAL SHELL
8 PIN OCTAL BASE

6N7

6N7GT/G

THE TUNG-SOL 6N7, 6N7GT/G ARE TWIN TRIODES DESIGNED PRIMARILY FOR SERVICE AS CLASS B AMPLIFIERS. THEIR ELECTRICAL CHARACTERISTICS ARE IDENTICAL.

RATINGS

MAXIMUM PLATE VOLTAGE 300 VOLTS
MAXIMUM PEAK PLATE CURRENT PER PLATE 125 MA.
MAXIMUM AVERAGE DISSIPATION PER PLATE 5.5 WATTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A1 AMPLIFIER

TRIODES CONNECTED IN PARALLEL

PLATE VOLTAGE 250 294 VOLTS
GRID VOLTAGE -5 -6 VOLTS
PLATE CURRENT 6 7 MA.
PLATE RESISTANCE 11 300 11 000 OHMS
TRANSCONDUCTANCE 3100 3200 UHMOS
AMPLIFICATION FACTOR 35 35

RESISTANCE COUPLED AMPLIFIER AND PHASE INVERTER

PLATE SUPPLY VOLTAGE 100 100 250 250 VOLTS
PLATE LOAD RESISTOR 0.1 0.5 0.1 0.5 MEGOHM
CATHODE RESISTOR 2500 7000 1800 5000 OHMS
VOLTAGE GAIN 20 22 23 24

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**TUNG-SOL**

**TYPICAL AND IDEAL OPERATING CONDITIONS AND CHARACTERISTICS**

**CLASS B₂ AMPLIFIER - PUSH-PULL**

<table>
<thead>
<tr>
<th></th>
<th>IDEAL</th>
<th>TYPICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZERO-SIGNAL PLATE VOLTAGE</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>DC GRID VOLTAGE</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AF-PEAK SIGNAL VOLTAGE PER GRID</td>
<td>29</td>
<td>41</td>
</tr>
<tr>
<td>MAXIMUM-PEAK-SIGNAL GRID CURRENT PER GRID</td>
<td>20</td>
<td>22</td>
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<tr>
<td>ZERO-SIGNAL PLATE CURRENT PER PLATE</td>
<td>17.5</td>
<td>17.5</td>
</tr>
<tr>
<td>MAXIMUM-SIGNAL DC PLATE CURRENT PER PLATE</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>GRID IMPEDANCE AT 400 CYCLES</td>
<td>0</td>
<td>516</td>
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<tr>
<td>PLATE SUPPLY IMPEDANCE</td>
<td>0</td>
<td>1000</td>
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<tr>
<td>EFFECTIVE LOAD RESISTANCE PLATE TO PLATE</td>
<td>8000</td>
<td>8000</td>
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<tr>
<td>TOTAL HARMONIC DISTORTION</td>
<td>4</td>
<td>8</td>
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<tr>
<td>THIRD HARMONIC</td>
<td>3.5</td>
<td>7.5</td>
</tr>
<tr>
<td>FIFTH HARMONIC</td>
<td>1.5</td>
<td>2.5</td>
</tr>
<tr>
<td>POWER OUTPUT</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

³ FOR POWER OUTPUT SHOWN

⁶ 500 OHMS AND 50 MH.

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**6N7, 6N7GT/G**

\( \text{E}_f = 6.3 \text{ V.} \)

Each Section

[Graph showing plate current (Iₚ) in milliamperes vs. plate volts (Eₚ) for different values of E₁.]