TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
LOW INPUT CAPACITANCE
HIGHER INPUT IMPEDANCE
DUAL CATHODE LEADS
PARTIAL SHIELD BETWEEN
THE GRID AND PLATE
ANY MOUNTING POSITION

THE 6GK5 IS A FRAME GRID GAIN CONTROLLED SHIELDED TRIODE IN THE SEVEN
PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A VHF RF AMPLI-
FIER AT A B+ OF 135 VOLTS.

DIRECT INTERELECTRODE CAPACITANCES
WITH EXTERNAL SHIELD

GRID TO PLATE
INPUT: G TO (HEATER +1.5 + E.S.)
OUTPUT: P TO (HEATER +1.5 + E.S.)
HEATER TO CATHODE

0.52 pf
5.0 pf
3.5 pf
2.5 pf

HEATER CHARACTERISTICS AND RATINGS
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-259

AVERAGE CHARACTERISTICS
6.3 VOLTS
180 MA.

HEATER SUPPLY LIMITS:
VOLTAGE OPERATION
MAXIMUM HEATER-CATHODE VOLTAGE:
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
HEATER POSITIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK

6.3±0.6 VOLTS
100 VOLTS
100 VOLTS

MAXIMUM RATINGS
DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-259

PLATE VOLTAGE
PLATE DISSIPATION
DC CATHODE CURRENT
NEGATIVE GRID VOLTAGE
GRID CIRCUIT RESISTANCE (SELF BIAS)
200 VOLTS
2.5 WATTS
22 MA.
.50 VOLTS
1.0 MEGOHMS

CONTINUED ON FOLLOWING PAGE
## TYPICAL OPERATING CHARACTERISTICS

**CLASS A\textsubscript{1} AMPLIFIER**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>PLATE VOLTAGE</td>
<td>135 V</td>
</tr>
<tr>
<td>GRID VOLTAGE</td>
<td>-1.0 V</td>
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<tr>
<td>PLATE CURRENT</td>
<td>11.5 mA</td>
</tr>
<tr>
<td>TRANSCONDUCTANCE</td>
<td>15,000 \textmu H</td>
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<tr>
<td>AMPLIFICATION FACTOR</td>
<td>78</td>
</tr>
<tr>
<td>PLATE RESISTANCE (APPROX.)</td>
<td>5400 \textOmega</td>
</tr>
<tr>
<td>( E_C ) FOR ( G_m = 450 \textmu H ) (APPROX.)</td>
<td>-4.2 V</td>
</tr>
<tr>
<td>( E_C ) FOR ( G_m = 1500 \textmu H ) (APPROX.)</td>
<td>-2.5 V</td>
</tr>
<tr>
<td>HOT INPUT RESISTANCE (200 Mc)\textsuperscript{c}</td>
<td>275 \textOmega</td>
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<tr>
<td>HOT INPUT CAPACITANCE (200 Mc)\textsuperscript{c}</td>
<td>11.2 \textmu F</td>
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<tr>
<td>NOISE FIGURE (200 Mc)\textsuperscript{d}</td>
<td>4.7 dB</td>
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\textsuperscript{c} Measured under grounded plate conditions.

\textsuperscript{d} Optimized neutralized triode RF amplifier stage, noise matched.