PENTODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE
HEATER
6.3 VOLTS 1.2 AMP.
AC OR DC
ANY MOUNTING POSITION

BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
980

GLASS BULB

THE 6BK5 IS A BEAM POWER AMPLIFIER UTILIZING THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE IN THE POWER OUTPUT STAGE OF TELEVISION AND RADIO RECEIVERS, IN WHICH ONLY SMALL DRIVING VOLTAGES ARE AVAILABLE. IT CAN ALSO BE USED AS A VIDEO AMPLIFIER IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES
WITH NO EXTERNAL SHIELD

GRID #1 TO PLATE: G4 TO P
INPUT: G4 TO (H+K+G2+G3)
OUTPUT: P TO (H+K+G2+G3)

0.06 µuf
13 µuf
5 µuf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER VALUES

HEATER VOLTAGE
MAXIMUM HEATER CATHODE VOLTAGE: +
HEATER NEGATIVE WITH RESPECT TO CATHODE
TOTAL DC AND PEAK
HEATER POSITIVE WITH RESPECT TO CATHODE
DC TOTAL DC AND PEAK
MAXIMUM PLATE VOLTAGE
MAXIMUM GRID #2 VOLTAGE
MAXIMUM POSITIVE DC GRID #1 VOLTAGE
MAXIMUM PLATE DISSIPATION
MAXIMUM GRID #2 DISSIPATION
MAXIMUM GRID #1 CIRCUIT RESISTANCE:
FIXED BIAS OPERATION
CATHODE BIAS OPERATION

6.3 VOLTS
200 VOLTS
100 VOLTS
200 VOLTS
250 VOLTS
250 VOLTS
0 VOLTS
9 WATTS
2.5 WATTS
0.1 MEGOHM
0.5 MEGOHM

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A\textsubscript{1} AMPLIFIER

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>6.3 VOLS</td>
</tr>
<tr>
<td>HEATER CURRENT</td>
<td>1.2 AMP.</td>
</tr>
<tr>
<td>PLATE VOLTAGE</td>
<td>250 VOLS</td>
</tr>
<tr>
<td>GRID #2 VOLTAGE</td>
<td>290 VOLS</td>
</tr>
<tr>
<td>GRID #1 VOLTAGE</td>
<td>-5 VOLS</td>
</tr>
<tr>
<td>PEAK AF GRID #1 VOLTAGE</td>
<td>5 VOLS</td>
</tr>
<tr>
<td>PLATE RESISTANCE (APPROX.)</td>
<td>100 000 OHMS</td>
</tr>
<tr>
<td>TRANSCONDUCTANCE</td>
<td>8 500 \mu MHS</td>
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<tr>
<td>ZERO-SIGNAL PLATE CURRENT</td>
<td>35 MA.</td>
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<tr>
<td>MAXIMUM SIGNAL PLATE CURRENT (APPROX.)</td>
<td>37 MA.</td>
</tr>
<tr>
<td>ZERO-SIGNAL GRID #2 CURRENT</td>
<td>3.5 MA.</td>
</tr>
<tr>
<td>MAXIMUM SIGNAL GRID #2 CURRENT (APPROX.)</td>
<td>10 MA.</td>
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<tr>
<td>LOAD RESISTANCE</td>
<td>6 500 OHMS</td>
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<tr>
<td>TOTAL HARMONIC DISTORTION (APPROX.)</td>
<td>7 PERCENT</td>
</tr>
<tr>
<td>POWER OUTPUT</td>
<td>3.5 WATTS</td>
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</tbody>
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**6BK5**

PENTODE CONNECTION

$E_f = 6.3$ Volts

$E_D = 250$ Volts