DOUBLE TRIODE
MINIATURE TYPE

COATED UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.4 AMP.
AC OR DC
ANY MOUNTING POSITION

THE 6BZ7 IS A MEDIUM MU DOUBLE TRIODE USING THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR SERVICE IN LOW NOISE VHF CASCODE AMPLIFIER APPLICATIONS.

DIRECT INTERELECTRODE CAPACITANCES
WITH EXTERNAL SHIELD #315

<table>
<thead>
<tr>
<th>GRID TO PLATE: (G TO P)</th>
<th>TRIODE UNIT #1</th>
<th>TRIODE UNIT #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>1.2</td>
<td>µµF</td>
</tr>
<tr>
<td>PLATE TO CATHODE: (P TO K)</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>HEATER TO CATHODE: (H TO K)</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>#1 INPUT: G TO (H+K+I.S.)</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>#2 INPUT: K TO (H+G+I.S.)*</td>
<td></td>
<td>5.0</td>
</tr>
<tr>
<td>#1 OUTPUT: P TO (H+K+I.S.)</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>#2 OUTPUT: P TO (H+G+I.S.)*</td>
<td></td>
<td>2.2</td>
</tr>
<tr>
<td>#1 PLATE TO #2 PLATE: (1P TO 2P) (MAX.)</td>
<td>0.010</td>
<td>µµF</td>
</tr>
<tr>
<td>#2 PLATE TO #1 PLATE &amp; GRID: (2P TO 1P+1G)(MAX)</td>
<td>0.024</td>
<td>µµF</td>
</tr>
</tbody>
</table>

*READ AS GROUNDED GRID AMPLIFIER.

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM
EACH TRIODE UNIT

HEATER VOLTAGE
6.3 VOLTS

MAXIMUM HEATER-CATHODE VOLTAGE
HEATER NEGATIVE WITH RESPECT TO CATHODE:**
TOTAL DC AND PEAK
200 VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE:
TOTAL DC AND PEAK
100 VOLTS
MAXIMUM PLATE VOLTAGE **
250 VOLTS
MAXIMUM PLATE DISSIPATION
2 WATTS
MAXIMUM CATHODE CURRENT
20 MA.
MAXIMUM GRID CIRCUIT RESISTANCE
0.5 MEGOHM

** THIS RATING MAY BE AS HIGH AS 300 VOLTS UNDER CUTOFF CONDITIONS, WHEN THE TUBE IS USED AS A CASCODE AMPLIFIER AND THE TWO SECTIONS ARE CONNECTED IN SERIES.

--INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE
## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A\_1 AMPLIFIER - EACH TRIODE UNIT

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>6.3</td>
</tr>
<tr>
<td>HEATER CURRENT</td>
<td>0.4</td>
</tr>
<tr>
<td>PLATE VOLTAGE</td>
<td>150</td>
</tr>
<tr>
<td>CATHODE BIAS RESISTOR</td>
<td>220</td>
</tr>
<tr>
<td>AMPLIFICATION FACTOR</td>
<td>36</td>
</tr>
<tr>
<td>PLATE RESISTANCE</td>
<td>5.300</td>
</tr>
<tr>
<td>TRANSCONDUCTANCE</td>
<td>6800</td>
</tr>
<tr>
<td>PLATE CURRENT</td>
<td>10</td>
</tr>
<tr>
<td>GRID VOLTAGE FOR $I_b = 100$ $\mu A$ (APPROX.)</td>
<td>$-7$ VOLTS</td>
</tr>
</tbody>
</table>