BEAM PENTODE

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

BOTTOM VIEW
INTERMEDIATE SHELL
6 PIN OCTAL
6 CK

GLASS BULB

THE 6AV5GT IS A BEAM POWER AMPLIFIER INTENDED PRIMARILY FOR OPERATION WITH RELATIVELY LOW SUPPLY VOLTAGE AS A HORIZONTAL DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS. IT IS DESIGNED TO WITHSTAND HIGH-SURGE PLATE VOLTAGES FOR RELATIVELY SHORT PERIODS OF TIME. IT CAN BE USED WITH DIRECT OR WITH TRANSFORMER HORIZONTAL-YOKE DRIVE.

RATINGS
INTERPRETED ACCORDING TO IMA STANDARD MR-210

HORIZONTAL DEFLECTION AMPLIFIER

HEATER VOLTAGE 6.3 VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE 180 VOLTS
MAXIMUM PLATE SUPPLY VOLTAGE 550 VOLTS
MAXIMUM PEAK POSITIVE PULSE PLATE VOLTAGEA 5,500 VOLTS
MAXIMUM GRID #2 VOLTAGE 200 VOLTS
MAXIMUM GRID #4 VOLTAGE -100 VOLTS
MAXIMUM PEAK NEGATIVE PULSE GRID #1 VOLTAGEA -400 VOLTS
MAXIMUM PLATE DISSIPATION 11 WATTS
MAXIMUM GRID #2 DISSIPATION 2.5 WATTS
MAXIMUM PLATE CURRENT 100 MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCEC 1 MEGOHM

A THE DUTY CYCLE OF THE VOLTAGE PULSE MUST NOT EXCEED 15% OF ONE SCANNING CYCLE AND THE DURATION OF THE PULSE MUST BE LIMITED TO 20 MICROSECONDS.
B VALUE GIVEN IS TO BE CONSIDERED AS THE ABSOLUTE VOLTAGE BEYOND WHICH THE SERVICEABILITY OF THE TUBE MAY BE IMPAIRED.
C THE USE OF A CATHODE RESISTOR OR OTHER SUITABLE PROTECTIVE DEVICE IS NECESSARY TO PROTECT THE TUBE IN EVENT OF LOSS OF EXCITATION AND CONSEQUENT LOSS OF DEVELOPED BIAS.

CONTINUED ON FOLLOWING PAGE

INDICATES A CHANGE OR ADDITION.
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE 6.3 VOLTS
HEATER CURRENT 1.2 AMP.
PLATE VOLTAGE 250 VOLTS
GRID #2 VOLTAGE 150 VOLTS
GRID #1 VOLTAGE -22.5 VOLTS
TRANSCONDUCTANCE 5800 MHO
PLATE CURRENT 55 MA.
GRID #2 CURRENT 2.1 MA.
GRID #2 TO GRID #1 AMPLIFICATION FACTOR 4.5

D) TRIDUCE CONNECTION (SCREEN TIED TO PLATE) WITH $E_2 = E_{C2} = 150$ VOLTS AND $E_{C1} = -22.5$ VOLTS.

HORIZONTAL DEFLECTION AMPLIFIER

<table>
<thead>
<tr>
<th>Model</th>
<th>BAP5A</th>
<th>12KPA</th>
<th>16KPA</th>
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<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>6.3</td>
<td>6.3</td>
<td>6.3</td>
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<tr>
<td>HEATER CURRENT</td>
<td>1.2</td>
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<tr>
<td>TOTAL PLATE VOLTAGE</td>
<td>240</td>
<td>370</td>
<td>410</td>
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<tr>
<td>PLATE SUPPLY VOLTAGE</td>
<td>150</td>
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<tr>
<td>BOOST VOLTAGE</td>
<td>90</td>
<td>120</td>
<td>160</td>
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<td>GRID #2 SUPPLY VOLTAGE</td>
<td>150</td>
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<tr>
<td>GRID #2 RESISTOR</td>
<td>1000</td>
<td>10000</td>
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<tr>
<td>GRID #2 VOLTAGE</td>
<td>135</td>
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<td>122</td>
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<tr>
<td>CATHODE BIAS RESISTOR</td>
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<td>0</td>
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<tr>
<td>GRID #1 RESISTOR</td>
<td>0.22</td>
<td>0.47</td>
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<tr>
<td>PEAK-TO-PEAK GRID SIGNAL VOLTAGE (APPROX.)</td>
<td>90</td>
<td>90</td>
<td>220</td>
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<tr>
<td>PEAK POSITIVE PULSE PLATE VOLTAGE (APPROX.)</td>
<td>2.9</td>
<td>3.6</td>
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<tr>
<td>PLATE CURRENT</td>
<td>84</td>
<td>89</td>
<td>87</td>
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<tr>
<td>GRID #2 CURRENT</td>
<td>15</td>
<td>8.5</td>
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<tr>
<td>GRID #1 CURRENT</td>
<td>66</td>
<td>40</td>
<td>64</td>
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<tr>
<td>PICTURE TUBE ANODE VOLTAGE</td>
<td>8.7E</td>
<td>10.8E</td>
<td>12.8E</td>
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<tr>
<td>DEFLECTION ANGLE</td>
<td>94</td>
<td>54</td>
<td>65</td>
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<tr>
<td>SWEEP WIDTH</td>
<td>7 3/4</td>
<td>11 1/2</td>
<td>13 1/2</td>
</tr>
</tbody>
</table>

E) MEASURED WITH 75 MICROAMPERES TOTAL PICTURE TUBE DRAIN.
F) MEASURED WITH 100 MICROAMPERES TOTAL PICTURE TUBE DRAIN.

PLATE 2520
OCT. 1 1950

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6AV5GT
PENTODE CONNECTION
$E_f = 6.3$ Volts
$E_b = 250$ Volts

PLATE VOLTS

PLATE (#1) OR GRID #2 (#2) MILLIAMPERES

GRID #1 VOLTS

PLATE MILLIAMPERES