VALVE TYPE 3A/105-B
LOW NOISE TRIODE.

SPECIFICATION.

Cathode.
Indirectly heated oxide coated.
Constant voltage type.

Base.
British small 4-pin.
Grid connected to top cap type B.

Dimensions.
Maximum overall length 3.9" (9.9 cms.)
Maximum diameter 1.1" (2.8 cms.)

Constants.
Heater voltage 13 volts
Heater current 0.19 amps.
*Amplification factor 40
*Impedance 19,000 ohms
*Mutual conductance 2.1 mA. per volt
Grid–anode capacity 1.5 μF.
Grid–cathode capacity 2.4 μF.
Anode–cathode capacity 4.5 μF.
* at Vp = 130 volts, Vg1 = —1.5 volts.

LIMITING CONDITIONS FOR SAFE OPERATION.

Maximum direct anode voltage 250 volts
Maximum anode dissipation 2.5 watts
Maximum direct anode current 15 mA.

Tentative data

W.3A/105-B.1
April 1939
## TYPICAL OPERATING CONDITIONS.

<table>
<thead>
<tr>
<th>Anode Voltage Volts</th>
<th>Grid Bias Volts</th>
<th>Load Resistance Ohms</th>
<th>Output mW.</th>
<th>Total Harmonics db</th>
</tr>
</thead>
<tbody>
<tr>
<td>130</td>
<td>-1</td>
<td>9,000</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>150</td>
<td>-1.5</td>
<td>11,000</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>200</td>
<td>-2</td>
<td>14,000</td>
<td>5</td>
<td>30</td>
</tr>
<tr>
<td>200</td>
<td>-2</td>
<td>14,000</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>250</td>
<td>-2.5</td>
<td>18,000</td>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>250</td>
<td>-2.5</td>
<td>18,000</td>
<td>30</td>
<td>27</td>
</tr>
</tbody>
</table>

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**ANODE VOLTAGE (VOLTS)**

**ANODE CURRENT (MILLIAMPS)**

**V_m = 13 VOLTS D.C.**

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