**DOUBLE DIODE**
**MINIATURE TYPE**

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.15 AMP.
AC OR DC
ANY MOUNTING POSITION

**BOTTOM VIEW**
**MINIATURE BUTTON**
**7 PIN BASE**
**5BY**

THE 12AL5 COMBINES TWO INDEPENDENT DIODE UNITS IN THE 7 PIN MINIATURE CONSTRUCTION. ITS HIGH PERCEANCE PERMITS HIGH EFFICIENCY IN EITHER FM OR AM DETECTOR SERVICE.

**DIRECT INTERELECTRODE CAPACITANCES**

<table>
<thead>
<tr>
<th></th>
<th>WITHOUT SHIELD</th>
<th>WITH SHIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLATE INPUT: P TO (H+K+15) EACH UNIT</td>
<td>2.5</td>
<td>3.2 µf</td>
</tr>
<tr>
<td>COUPLING: 1P TO 2P (MAX.)</td>
<td>0.068</td>
<td>0.026 µf</td>
</tr>
<tr>
<td>CATHODE INPUT: K TO (P+H+15) EACH UNIT</td>
<td>3.4</td>
<td>3.6 µf</td>
</tr>
</tbody>
</table>

*A EXTERNAL SHIELD #325 CONNECTED TO PIN #6.*

**RATINGS**
**INTERPRETED ACCORDING TO RMA STANDARD MB-210**

<table>
<thead>
<tr>
<th></th>
<th>VOLTS</th>
<th>VOLTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM HEATER-CATHODE VOLTAGE</td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM PEAK INVERSE VOLTAGE</td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM AC PLATE VOLTAGE (EACH PLATE) RMS</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM STEADY STATE PEAK PLATE CURRENT (EACH PLATE)</td>
<td>54</td>
<td>MA.</td>
</tr>
<tr>
<td>MAXIMUM DC OUTPUT CURRENT (EACH PLATE)</td>
<td>9</td>
<td>MA.</td>
</tr>
<tr>
<td>MINIMUM TOTAL EFFECTIVE PLATE SUPPLY IMPEDANCE (EACH PLATE)</td>
<td>300</td>
<td>OHMS</td>
</tr>
</tbody>
</table>

**TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS**
**HALF-WAVE RECTIFIER**

<table>
<thead>
<tr>
<th></th>
<th>VOLTS</th>
<th>AMP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEATER VOLTAGE</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>HEATER CURRENT</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>AVERAGE DIODE CURRENT (EACH UNIT) AT 10 VOLTS DC</td>
<td>60</td>
<td>MA.</td>
</tr>
</tbody>
</table>

THE RESONANT FREQUENCY OF EACH UNIT OF THE 12AL5 IS 700 MC. (APPROX.)

---

*INDICATES A CHANGE OR ADDITION.*
**12AL5 (6AL5)**

**12AL5**

*Each Diode Unit*

\[ E_f = 12.6 \text{ Volts} \]

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**Graphs:**

**Plate Currents vs. Plate Voltage (DC):**

- Plate Currents range from 0 to 50 milliamperes.
- Plate Voltages range from 0 to 10 volts.

**DC Voltage Developed by Diode vs. Rectified Microamperes:**

- DC Voltage range from -40 to 0 volts.
- Rectified Microamperes range from 0 to 150.

---

**Load Resistors:**

- 2 Megohm
- 0.5 Megohm
- 0.25 Megohm
- 0.1 Megohm

**EWS Signal Input:**

- 30 Volts