The OSRAM A577 triode is designed with characteristics suitable for use in a valve voltmeter which is mains-operated, portable, and capable of operating at high frequencies, and at the same time covering a wide range of voltages. In such an instrument the valve operates as an anode bend rectifier and may be calibrated to read R.M.S. volts on a sinusoidal supply.

Type A577 is suitable for use in such an instrument on all frequencies included in normal radio and audio frequency work, but is not applicable to an audio frequency amplifier.

**CHARACTERISTICS.**

Heater Volts .................. 4.0
Heater Current ................ 1.0 amp.
Anode Volts ................... 250 max.
Amplification Factor ......... 6 measured at
Impedance .................... 3,000 Ea=100
Mutual Conductance .......... 2.0 mA/v. Eg=0
Input A.C. resistance (measured on a cold valve at 1 megacycle) .......... 20 megohms approx
Input Capacity ............... 6.0 mmfd. approx.

BASE, 5-pin.
Pin 1: Anode
2: —
3: Heater
4: Heater
5: Cathode
Top Cap: Grid

**OPERATING CONDITIONS.**

A typical circuit diagram opposite shows type A577 operating as a self-biased anode bend rectifier.

It is important that the lead from the grid terminal be made as short as possible and if connected to any additional terminal, insulators must be of low loss construction.

The voltmeter may be designed for mains operation or can be run from batteries.

For prices see pages 126-129.
TYPE A577

Typical Circuit Diagram.

R₁ and R₂ backing off circuit with zero adjustment on R₃.
The microammeter M should be short circuited while connecting up the supplies.

**Recommended Values (approximate.)**

<table>
<thead>
<tr>
<th>R.M.S. Voltage Range ..</th>
<th>0–5</th>
<th>0–15</th>
<th>0–50</th>
<th>0–100</th>
<th>0–150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage E (anode + bias)</td>
<td>35</td>
<td>75</td>
<td>270</td>
<td>270</td>
<td>270</td>
</tr>
<tr>
<td>Bias Resistance R₁ ..</td>
<td>13,000</td>
<td>60,000</td>
<td>250,000</td>
<td>550,000</td>
<td>800,000</td>
</tr>
<tr>
<td>ohms</td>
<td>ohms</td>
<td>ohms</td>
<td>ohms</td>
<td>ohms</td>
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</tr>
</tbody>
</table>

**CHARACTERISTIC CURVES OF AVERAGE VALVE.**