527
HIGH-MU TRIODE

GENERAL CHARACTERISTICS  
(TENTATIVE)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filament Voltage</td>
<td>5.5 volts</td>
</tr>
<tr>
<td>Filament Current</td>
<td>135 amperes</td>
</tr>
<tr>
<td>Amplification Factor (Average)</td>
<td>38</td>
</tr>
<tr>
<td>Plate Dissipation (Max.)</td>
<td>300 watts</td>
</tr>
<tr>
<td>Peak Filament Emission (Min.) $e_b = e_c = 2500$ v.</td>
<td>100 amperes</td>
</tr>
<tr>
<td>Maximum Plate Voltage</td>
<td>20.0 kilovolts</td>
</tr>
<tr>
<td>Direct Interelectrode Capacitances (Avg.)</td>
<td></td>
</tr>
<tr>
<td>Grid-Plate</td>
<td>12 mmfd.</td>
</tr>
<tr>
<td>Grid-Filament</td>
<td>19 mmfd.</td>
</tr>
<tr>
<td>Plate-Filament</td>
<td>1.4 mmfd.</td>
</tr>
<tr>
<td>Maximum Overall Dimensions</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>13 inches</td>
</tr>
<tr>
<td>Diameter</td>
<td>2-5/8 inches</td>
</tr>
</tbody>
</table>
527 High-Mu Triode

GENERAL CHARACTERISTICS

Filament Voltage
Current

Amplification Factor (Average) 38.

Plate Dissipation (Max.) 300 Watts
Grid Dissipation (Max.) 60 Watts

Peak Filament Emission (Min.) \( e_b = 8_c = 2500 \text{ V} \)

Maximum Plate Voltage 100 Amperes
20.0 Kilovolts

Direct Interelectrode Capacitances (Average)
Grid-Plate 12 Mmfd.
Grid-Filament 19 Mmfd.
Plate-Filament 1.4 Mmfd.

Maximum Overall Dimensions
Length 13 Inches
Diameter 2-5/8 Inches

Forced Air Cooling
Through Base Pin
Across Bulb (Min.) 2 CFM

TYPICAL OPERATION - RF PULSED OSCILLATOR - 4 Tubes

Filament Voltage 5.5 Volts
Filament Current 135 Amperes
Plate Voltage 18,000 Volts

Duty Cycle 0.09 Per Cent

Average DC Plate Current 160 Milliampere
Average DC Grid Current 40 Milliampere

Grid Impedance 50 Ohms
Average Power Output 900 Watts
Peak RF Power Output 1000 Kilowatts

June 18, 1948

(TENTATIVE)