RADIO VALVE COMPANY LIMITED

7382

The RVD 133 is a miniature high-mu triode with low hum features that make it particularly suitable for audio preamplifier use.

**GENERAL DATA**

**Electrical:**
- Cathode: Coated Unipotential
- Heater Voltage A.C. or D.C.: 6.3 volts
- Heater Current: 0.3 amps
- Direct interelectrode capacitances with external shield
  - Grid to Plate: 2.0 uuf
  - Input: 2.2 uuf
  - Output: 0.8 uuf

**Mechanical:**
- Mounting Position: Any
- Maximum Overall Length: 2 1/8"
- Maximum Seated Length: 1 7/8"
- Length from base seat to bulb top: 1 1/2 ± 3/32"
- Maximum Diameter: 3/4"
- Bulb: T 5/32"
- Base: Small Button 7-Pin

**MAXIMUM RATINGS**

**Design Center Values:**
- Plate Voltage: 300 volts max.
- Heater Cathode Voltage: 90 volts max.
- Plate Dissipation: 0.5 watts max.
- Positive D.C. Grid Voltage: 0 volts max.

**CHARACTERISTICS & TYPICAL OPERATION**

**Class A1 Amplifier Service:**
- Plate Voltage: 100 volts
- Grid #1 Voltage: -1 volts
- Plate Resistance: 80,000 ohms
- Amplification Factor: 100
- Transconductance: 1250 umhos
- Plate Current: 0.5 mA

**Resistance Coupled Amplifier Service:**
- Plate Supply Voltage: 90 volts
- Control Grid Voltage: 0 volts
- Plate Load Resistance: 220,000 ohms
- Control Grid Resistor: 10.0 megohms
- Input Condenser: 0.01 uF
- Output Condenser: 0.01 uF
- Grid Resistor of Following Stage: 470,000 ohms
- Signal Source Impedance: 1000 ohms (max)

- Distortion: 5% 5%

from JEDEC release #2570, Aug. 31, 1959
Resistance Coupled Amplifier Service: cont'd

Output Voltage .................................... 5.5 30 volts
Voltage gain at 400 c/s ........................... 43 63

**HUM LEVEL**

**Average Values:**

Under the following circuit conditions

\[ E_p = 250 \text{ V} \quad E_f = 6.3 \text{ V balanced to ground} \]
\[ R_k = 2,200 \text{ ohms} \quad C_k = 100 \text{ uf} \]
\[ R_{gl} = 100,000 \text{ ohms} \]

with bypassed RK ................................. 2.0\text{uV}

Unbypassed RK .................................... 15.0\text{uV}

Hum level is in \text{uV} referred to the grid of the tube under test.

**DIMENSIONAL OUTLINE**

[Diagram of tube dimensions]

**SOCKET CONNECTIONS**

(Bottom View)

<table>
<thead>
<tr>
<th>Pin 1</th>
<th>Pin 2</th>
<th>Pin 3</th>
<th>Pin 4</th>
<th>Pin 5</th>
<th>Pin 6</th>
<th>Pin 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid</td>
<td>Cathode</td>
<td>Heater</td>
<td>Heater</td>
<td>N.C</td>
<td>N.C</td>
<td>Plate</td>
</tr>
</tbody>
</table>

Measured from base seat to bulb-tip line as determined by ring gauge of 7/16" I.D.

Small-Button 7-Pin Base