MAZDA
V.453
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation

GENERAL
The V.453 is a low "hum", low noise, non-microphonic valve for use in the early stages of high gain amplifiers where the "Miller" input loading must be kept at a minimum, and where the elimination of "flicker" noise is of particular importance.

RATING
Heater Voltage (volts) \( V_h \) 4.0
Heater Current (amps) \( I_h \) 0.65
Maximum Anode Voltage (volts) \( V_{a(max)} \) 250
Maximum Screen Voltage (volts) \( V_{g2(max)} \) 150
Mutual Conductance (mA/V) \( g_m \) \( \approx 2.0 \)

\( \approx \) Taken at \( V_a = 250 \text{ v}; V_{g2} = 100 \text{ v}; V_{g1} = -1.8 \text{v}. \)

INTER-ELECTRODE CAPACITANCES
Anode/Earth (\( \mu \text{F} \)) \( c_{out} \) 11.6
Anode/Control Grid (\( \mu \text{F} \)) \( c_{a,g1} \) 0.004
Control Grid/Earth (\( \mu \text{F} \)) \( c_{in} \) 6.75

DIMENSIONS
Maximum Overall Length (mm) 107
Maximum Diameter (mm) 32
Maximum Seated Height (mm) 94
Approximate Nett Weight (ozs) 1½
Approximate Packed Weight (ozs) 2

MOUNTING POSITION — Unrestricted.
**MAZDA**

**V.453**

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**BULB** Metallised.

**BASE** British Octal (B.O.7.)

![Pin Diagram]

Viewed from free end of pins.

**CAP** B.V.A. Standard

**CONNEXIONS**

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heater</td>
<td>h</td>
</tr>
<tr>
<td>2</td>
<td>Cathode</td>
<td>k</td>
</tr>
<tr>
<td>3</td>
<td>Anode</td>
<td>a</td>
</tr>
<tr>
<td>4</td>
<td>Screen Grid</td>
<td>S2</td>
</tr>
<tr>
<td>5</td>
<td>Suppressor Grid</td>
<td>S3</td>
</tr>
<tr>
<td>6</td>
<td>Metallising</td>
<td>M</td>
</tr>
<tr>
<td>7</td>
<td>Omitted</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Heater</td>
<td>h</td>
</tr>
<tr>
<td>Top Cap</td>
<td>Control Grid</td>
<td>S1</td>
</tr>
</tbody>
</table>

August 1948

**RADIO DIVISION**

**THE EDISON SWAN ELECTRIC COMPANY LTD.**
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AVERAGE CHARACTERISTIC CURVES

Curves taken at Vg = 250, Vb = 0.
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AVERAGE CHARACTERISTIC CURVES

$g_m$ in $\mu$A/V

Curves taken at $V_a=250$, $V_b=0$