GENERAL

The 6 F 32 has a short cut off Suppressor Grid characteristic which makes it particularly suitable for use in Modulator, Variable Reactance and Timing Circuits.

RATING

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heater Voltage (volts)</td>
<td>$V_h$</td>
</tr>
<tr>
<td>Heater Current (amps)</td>
<td>$I_h$</td>
</tr>
<tr>
<td>Maximum Anode Voltage (volts)</td>
<td>$V_a(\text{max})$</td>
</tr>
<tr>
<td>Maximum Screen Voltage (volts)</td>
<td>$V_{g2}(\text{max})$</td>
</tr>
<tr>
<td>Mutual Conductance (mA/V)</td>
<td>$g_m$</td>
</tr>
<tr>
<td>Inner $\mu$</td>
<td>$\mu_{gl-\mu g2}$</td>
</tr>
<tr>
<td>Maximum Anode Dissipation (watts)</td>
<td>$P_a(\text{max})$</td>
</tr>
<tr>
<td>Maximum Screen Dissipation (watts)</td>
<td>$P_{g2}(\text{max})$</td>
</tr>
<tr>
<td>Maximum Potential Heater/Cathode (volts DC)</td>
<td>$V_{h-k}(\text{max})$</td>
</tr>
</tbody>
</table>

- Taken at $V_a = V_{g2} = 200V$; $V_{gl} = -4V$; $V_{g3} = 0V$.
- $\mu = \frac{\delta V_{g2}}{\delta V_{gl}}$ with $I_g$ constant

Low grid resistance should be employed, particularly when running at maximum dissipation.

INTER-ELECTRODE CAPACITANCES

<table>
<thead>
<tr>
<th>Capacitance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode/Earth (\mu F)</td>
<td>Cout</td>
</tr>
<tr>
<td>Anode/Control Grid (\mu F)</td>
<td>ca-gl</td>
</tr>
<tr>
<td>Control Grid/Earth (\mu F)</td>
<td>cin</td>
</tr>
</tbody>
</table>

"Earth" denotes the remaining earthy potential electrodes, heater and metallising joined to cathode.

DIMENSIONS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Overall Length (mm)</td>
<td>96</td>
</tr>
<tr>
<td>Maximum Diameter (mm)</td>
<td>32</td>
</tr>
<tr>
<td>Maximum Seated Height (mm)</td>
<td>83.5</td>
</tr>
<tr>
<td>Approximate Nett Weight (ozs)</td>
<td>1\frac{1}{4}</td>
</tr>
<tr>
<td>Approximate Packed Weight (ozs)</td>
<td>1\frac{1}{4}</td>
</tr>
</tbody>
</table>

MOUNTING POSITION - Unrestricted
MAZDA
6F32
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation
REPLACEMENT TYPE

TYPICAL OPERATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Value 1</th>
<th>Value 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode Voltage (volts)</td>
<td>Va</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Screen Voltage (volts)</td>
<td>Vg2</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Control Grid Bias Voltage (volts)</td>
<td>Vg1</td>
<td>-4.5</td>
<td>-4.5</td>
</tr>
<tr>
<td>Suppressor Grid Bias Voltage (volts)</td>
<td>Vg3</td>
<td>0</td>
<td>-3.3</td>
</tr>
<tr>
<td>Anode Current (mA)</td>
<td>Ia</td>
<td>5.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Screen Current (mA)</td>
<td>Ig2</td>
<td>3.45</td>
<td>5.5</td>
</tr>
<tr>
<td>Mutual Conductance (mA/V)</td>
<td>gm</td>
<td>3.0</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Approximate Suppressor Grid Bias (volts) for 50 μA/V with $V_{g1} = -4.5$V.

BULB  Metallised

BASE  B.0.7

Viewed from free ends of pins

CAP  B.V.A. Standard

CONNECTIONS

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
<th>Symbol</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>g2</td>
</tr>
<tr>
<td>5</td>
<td>Suppressor Grid</td>
<td>g3</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>g1</td>
</tr>
</tbody>
</table>

Indicates a change

November 1956

VALVE & CRT DIVISION

THE EDISON SWAN ELECTRIC COMPANY LTD.
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation
Replacement Type

AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_0 = V_2 = 200V$

Where the curve is broken a dissipation limit is exceeded.

Indicates a change
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation
Replacement Type

AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_{g}=V_{g}^{000K}$
Where the curve is broken a dissipation limit is exceeded.
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation
Replacement Type
AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_2=V_{2}=200V$

- Anode Current
- Screen Current
- Anode Current
- Screen Current

In these regions dissipation limit is exceeded

Indicates a change
EDISWAN
MAZDA
6F32
SCREENED R.F. PENTODE
Indirectly heated—for parallel operation
Replacement Type
AVERAGE CHARACTERISTIC CURVES
Curves taken at $V_g = 200V$

Key
- Anode Current
- Screen Current

In these regions a dissipation limit is exceeded.

Indicates a change

November 1956
VALVE & CRT DIVISION
SIEMENS EDISON SWAN LIMITED