EDISWAN
MAZDA
6L19
DOUBLE TRIODE
Indirectly heated—for parallel operation
REPLACEMENT TYPE

RATING
Heater Voltage (volts) \( V_h \) 6.3
Heater Current (amps) \( I_h \) 0.4
Maximum Anode Voltage (volts) \( V_{a(max)} \) 250
Mutual Conductance (mA/V) \( g_m \) 3.3*
Amplification Factor \( \mu \) 55*
Anode Impedance (ohms) \( r_a \) 16,000*
Maximum Anode Dissipation (each section (watts)) \( P_{a(max)} \) 1.5
Maximum Potential Heater/Cathode (volts DC) \( V_{h-k(max)} \) 150

* Taken at \( V_a = 200 \text{V} \); \( I_a = 5 \text{mA} \).

INTER-ELECTRODE CAPACITANCES (pF) * §

| Grid 1/Anode 1 | \( c_{a'-a'} \) | 2.5 | 2.7 |
| Grid 2/Anode 2 | \( c_{a''-a''} \) | 2.5 | 2.7 |
| Grid 1/Earth | \( c_{g'-E} \) | 2.8 | 4.1 |
| Grid 2/Earth | \( c_{g''-E} \) | 2.9 | 4.2 |
| Anode 1/Earth | \( c_{a'-E} \) | 2.5 | 3.8 |
| Anode 2/Earth | \( c_{a''-E} \) | 2.3 | 3.6 |
| Anode 1/Anode 2 | \( c_{a'-a''} \) | 0.65 | 0.65 |
| Grid 1/Grid 2 | \( c_{g'-g''} \) | 0.014 | 0.015 |
| Grid 1/Anode 2 | \( c_{g'-a'} \) | 0.038 | 0.039 |
| Grid 2/Anode 1 | \( c_{g''-a'} \) | 0.06 | 0.07 |

* Inter-electrode capacitances with holder capacitance balanced out.

§ Total capacitances including a Benjamin B8A moulded holder measured at a frequency of 1 Mc/s.

"Earth" denotes electrodes of any second valve section and the remaining earthy potential electrodes of the section under measurement and heater joined to cathode.
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DIMENSIONS
Maximum Overall Length (mm) 67
Maximum Diameter (mm) 22
Maximum Seated Height (mm) 54
Radius over location Key (mm) 12.25
Approximate Nett Weight (ozs) \( \frac{3}{4} \)
Approximate Packed Weight (ozs) 1

MOUNTING POSITION—Unrestricted.

TYPICAL OPERATION—As Resistance Capacity Coupled Amplifier*

<table>
<thead>
<tr>
<th></th>
<th>H.T. applied Voltage</th>
<th>Decoupling resistance (ohms)</th>
<th>Anode load resistance (ohms)</th>
<th>Cathode self bias resistance (ohms)</th>
<th>Anode Current (mA)</th>
<th>§Voltage Amplification</th>
<th>§Output Voltage (RMS) for 2 1/2 % Second Harmonic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>260</td>
<td>22,000</td>
<td>47,000</td>
<td>1,200</td>
<td>1.7</td>
<td>34</td>
<td>18.5</td>
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<tr>
<td></td>
<td>260</td>
<td>22,000</td>
<td>100,000</td>
<td>1,800</td>
<td>1.1</td>
<td>38</td>
<td>22</td>
</tr>
</tbody>
</table>

§ When feeding into 470,000 ohms in the grid circuit of the following valve.

* The figures quoted are for one valve section.

BULB—Clear

September 1959
VALVE & CRT DIVISION
SIEMENS EDISON SWAN LIMITED

Indicates a change
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BASE—B8A.

Viewed from free end of pins

**CONNECTIONS**

<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>Anode 2</td>
<td>a''</td>
</tr>
<tr>
<td>3</td>
<td>Grid 2</td>
<td>g''</td>
</tr>
<tr>
<td>4</td>
<td>Cathode 2</td>
<td>k''</td>
</tr>
<tr>
<td>5</td>
<td>Anode 1</td>
<td>a'</td>
</tr>
<tr>
<td>6</td>
<td>Grid 1</td>
<td>g'</td>
</tr>
<tr>
<td>7</td>
<td>Cathode 1</td>
<td>k'</td>
</tr>
<tr>
<td>8</td>
<td>Heater</td>
<td>h</td>
</tr>
</tbody>
</table>
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AVERAGE CHARACTERISTIC CURVES

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AVERAGE CHARACTERISTIC CURVES

GRID VOLTS

MUTUAL CONDUCTANCE (g_m) in mA/V

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