R.F. DOUBLE TRIODE

Double triode intended for use as oscillator, mixer or amplifier in television receivers.

<table>
<thead>
<tr>
<th>QUICK REFERENCE DATA (each unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anode current</td>
</tr>
<tr>
<td>Transconductance</td>
</tr>
<tr>
<td>Amplification factor</td>
</tr>
</tbody>
</table>

**HEATING**: Indirect by A.C. or D.C.; series or parallel supply

<table>
<thead>
<tr>
<th>Heater voltage</th>
<th>6.3</th>
<th>12.6 V</th>
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<tbody>
<tr>
<td>Heater current</td>
<td>$I_f$ 300(^1)</td>
<td>150(^1) mA</td>
</tr>
<tr>
<td>pins 9-(4+5)</td>
<td>pins 4-5</td>
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</table>

**DIMENSIONS AND CONNECTIONS**

Base: Noval

Dimensions in mm

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\(^1\) In case of series supply a current limiting device must be inserted in the heater circuit for limiting the current when switching on.
CAPACITANCES

Grid to all except anode
- $C_{g(a)}$ 2.3 pF
- $C_{g'(a')}$ 2.3 pF

Anode to all except grid
- $C_{a(g)}$ 0.45 pF
- $C_{a'(g')}$ 0.35 pF

Anode to grid
- $C_{ag}$ 1.6 pF
- $C_{a'g'}$ 1.6 pF

Anode to cathode
- $C_{ak}$ 0.20 pF
- $C_{a'k'}$ 0.20 pF

Cathode to heater
- $C_{kf}$ 2.5 pF
- $C_{k'f}$ 2.5 pF

Cathode to grid + heater
- $C_{k/g+f}$ 4.7 pF
- $C_{k'/g'+f}$ 4.7 pF

Anode to grid + heater
- $C_{a/g+f}$ 1.9 pF
- $C_{a'/g'+f}$ 1.8 pF

Grid to heater
- $C_{gf}$ max. 0.17 pF
- $C_{g'f}$ max. 0.17 pF

Anode to anode
- $C_{aa'}$ max. 0.4 pF

Grid to grid
- $C_{gg'}$ max. 0.005 pF

Anode to grid other unit
- $C_{ag'}$ max. 0.07 pF

Grid to anode other unit
- $C_{ga'}$ max. 0.04 pF

TYPICAL CHARACTERISTICS AND OPERATING CONDITIONS (each unit)

Anode voltage $V_a$
- 100
- 170
- 200
- 250 V

Grid voltage $V_g$
- -1.0
- -1.0
- -1.0
- -2.0 V

Anode current $I_a$
- 3.0
- 8.5
- 11.5
- 10 mA

Transconductance $S$
- 3.75
- 5.9
- 6.7
- 5.5 mA/V

Amplification factor $\mu$
- 62
- 66
- 70
- 60

Internal resistance $R_i$
- 16.5
- 11
- 10.5
- 11 kΩ

LIMITING VALUES (Design centre rating system) (each unit)

Anode voltage $V_{ao}$ max.
- 550 V

Anode dissipation $W_a$ max.
- 2.5 W

Cathode current $I_k$ max.
- 15 mA

Grid voltage $-V_g$ max.
- 50 V

Grid resistor (automatic bias) $R_g$ max.
- 1 MΩ

Cathode to heater voltage $V_{kf}$ max.
- 90 V
## ECC81

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