OUTPUT PENTODE

Output pentode suitable for use in the line time base of television receivers or as a series regulator valve in stabilised power supply units.

HEATER

\[ V_h = 6.3 \text{ V} \]
\[ I_h = 1.05 \text{ A} \]

CAPACITANCES (measured without external shield)

Pentode connected

\[ C_{1a} = 14.7 \text{ pF} \]
\[ C_{out} = 6.0 \text{ pF} \]
\[ C_{a-g1} = <0.8 \text{ pF} \]
\[ C_{a-k} = <0.1 \text{ pF} \]
\[ C_{g1-h} = <0.2 \text{ pF} \]

Triode connected

\[ C_{1n} = 8.7 \text{ pF} \]
\[ C_{out} = 11.4 \text{ pF} \]
\[ C_{a-g1} = 6.6 \text{ pF} \]

CHARACTERISTICS

Pentode connected

\[ V_a = 250 \text{ V} \]
\[ V_{g3} = 0 \text{ V} \]
\[ V_{g2} = 250 \text{ V} \]
\[ V_{g1} = -38.5 \text{ V} \]
\[ I_a = 32 \text{ mA} \]
\[ I_{g2} = 2.4 \text{ mA} \]
\[ g_m = 4.6 \text{ mA/V} \]
\[ r_a = 15 \text{ k}\Omega \]
\[ \mu_{g1-g2} = 5.1 \]

Triode connected (g_2 connected to a, g_3 connected to k)

\[ V_a = 250 \text{ V} \]
\[ V_{g1} = -38 \text{ V} \]
\[ I_a = 40 \text{ mA} \]
\[ g_m = 5.5 \text{ mA/V} \]
\[ r_a = 1.0 \text{ k}\Omega \]
\[ \mu = 5.5 \]

ISSUE 3

Mullard

EL81 1157-1
EL81

OUTPUT PENTODE

Output pentode suitable for use in the line time base of television receivers or as a series regulator valve in stabilised power supply units.

LIMITING VALUES

\[ V_{B} \text{ (max.)} \]
\[ V_{a} \text{ max.} \]
\[ V_{a(p)} \text{ max.} \]
\[ p_{a} \text{ max.} \]
\[ V_{g2} \text{(max.)} \]
\[ V_{g2} \text{ max.} \]
\[ p_{g2} \text{ max.} \]
\[ p_{a+g2} \text{ max.} \]
\[ I_{k} \text{ max.} \]
\[ V_{g1} \text{ max.} \] \( (I_{g1} = +0.3\mu A) \)
\[ R_{g1-k} \text{ max.} \]
\[ V_{h-k} \text{ max.} \]
\[ R_{h-k} \text{ max.} \]
\[ T_{bulb} \text{ max.} \]

550 \text{ V}
300 \text{ V}
7.0 \text{ kV}
8.0 \text{ W}
550 \text{ V}
300 \text{ V}
4.5 \text{ W}
10 \text{ W}
180 \text{ mA}
-1.3 \text{ V}
500 \text{ k}\Omega
100 \text{ V}
20 \text{ k}\Omega
185 \text{ °C}

*Max. pulse duration 18% of one cycle, with a maximum of 18\mu s