SUBMINIATURE OUTPUT PENTODE

Audio output pentode.

EL71

HEATER

\[ \begin{align*}
V_h & = 6.3 \text{ V} \\
I_h & = 450 \text{ mA}
\end{align*} \]

MOUNTING POSITION

Any

Note – Direct soldered connections to the leads of this valve must be at least 5mm from the seal and any bending of the valve leads must be at least 1.5mm from the seal.

COOLING

In operation this valve may become very hot and to obtain satisfactory life it should be adequately cooled. A suitable method is to mount the valve in a metal clip which conducts the heat away to a suitable heat sink.

CAPACITANCES

\[ \begin{align*}
C_{an} & < 0.2 \text{ pF} \\
C_{in} & = 6.5 \text{ pF} \\
C_{out} & = 7.5 \text{ pF}
\end{align*} \]

CHARACTERISTICS

\[ \begin{align*}
V_a & = 100 \text{ V} \\
V_{g2} & = 100 \text{ V} \\
I_n & = 30 \text{ mA} \\
I_{g2} & = 1.2 \text{ mA} \\
G_m & = 4.2 \text{ mA/V} \\
R_n & = 15 \text{ k\(\Omega\)} \\
V_{cl} & = -8.3 \text{ V} \\
V_{g1} (I_n - 10\mu A) & = -40 \text{ V}
\end{align*} \]

TYPICAL OPERATING CONDITIONS

\[ \begin{align*}
V_{a c} & = 110 \text{ V} \\
V_{g2 c} & = 110 \text{ V} \\
I_a & = 30 \text{ mA} \\
I_{g2} & = 1.2 \text{ mA} \\
R_k & = 270 \text{ \(\Omega\)} \\
R_n & = 3.0 \text{ k\(\Omega\)} \\
V_{Imr, rms} & = 6.4 \text{ V} \\
P_{out} & = 1.0 \text{ W} \\
D_{tot} & = 10 \text{ \%}
\end{align*} \]

LIMITING VALUES (absolute ratings)

\[ \begin{align*}
V_{a(hi)} \text{ max.} & = 330 \text{ V} \\
V_a \text{ max.} & = 165 \text{ V} \\
p_a \text{ max.} & = 4.0 \text{ W} \\
V_{g2(hi)} \text{ max.} & = 310 \text{ V} \\
V_{g2} \text{ max.} & = 155 \text{ V} \\
p_{g2} \text{ max.} & = 1.0 \text{ W} \\
V_{g1} \text{ max.} & = 55 \text{ V} \\
l_k \text{ max.} & = 50 \text{ mA} \\
V_{h k} \text{ max.} & = 200 \text{ V}
\end{align*} \]