Monitor Cathode Ray Tube

VLS492AB (Blue Screen)  VLS492AG (Green Screen)

CATHODE.
Indirectly-heated oxide-coated
Voltage \( \text{V} \)
Nominal current \( 1.8 \text{ A} \)

INTER-ELECTRODE CAPACITIES.
\[
\begin{align*}
X_1 \text{ to } X_2 & \quad 0.8 \text{ pF} \\
Y_1 \text{ to } Y_2 & \quad 4.3 \text{ pF} \\
X_1 \text{ to all} & \quad 6.6 \text{ pF} \\
Y \text{ to all} & \quad 6.0 \text{ pF} \\
\text{Grid to all} & \quad 8.5 \text{ pF}
\end{align*}
\]

CONSTANTS.
Second anode voltage \( 250 \text{ to } 1,000 \text{ V} \)
First anode voltage \( 130 \text{ to } 500 \text{ V} \)
Sensitivity where \( V_{a2} \) = 2nd anode voltage
\[
\begin{align*}
X \text{ plates} & \quad 110 \text{ mm./V} \\
\frac{V_{a2}}{V_{a2}} \\
Y \text{ plates} & \quad 120 \text{ mm./V} \\
\frac{V_{a2}}{V_{a2}}
\end{align*}
\]

DIMENSIONS.
Maximum overall length \( 181 \text{ mm.} \)
Maximum bulb diameter \( 40 \text{ mm.} \)
Base Medium shell Octal
Net weight \( 100 \text{ g.} \)

TYPICAL OPERATION.
Second anode voltage \( 500 \text{ to } 1,000 \text{ V} \)
First anode voltage \( 100 \text{ to } 200 \text{ V} \)
Grid bias \( 0 \text{ to } -5 \text{ V} \) \( -5 \text{ to } -10 \text{ V} \)

NOTES ON OPERATION.
1. The life of the tube will be materially increased by keeping the negative grid bias as high as is consistent with the brilliance required.
2. Earthing the second anode increases the stability of the trace.

June 1946
NOTES ON OPERATION—(continued)

3. Provision should be made for a path from the deflector-plates to the anode, e.g. by resistance of 1 to 5 MΩ. The plate Y is strapped to the second anode internally.

4. The tube operates more effectively at the higher anode voltages.

5. Focusing is effected by the variation of the first anode voltage for a fixed value of second anode voltage.

6. The key-way is 45° to the plane of the deflector plates.