

Trigger Tube

GTR120W

An inexpensive sub-miniature tube especially designed for computer applications

Limit Ratings

Maximum anode voltage to prevent self-ignition in all tubes (trigger voltage 0 V)	+310 V
Maximum trigger-cathode voltage at which breakdown will not occur in any tube	
Cathode 0, Trigger +110, Anode +310	
Cathode 0, Trigger -100, Anode +150	
Minimum trigger voltage necessary to cause breakdown in all tubes (anode voltage 290 V)	+170 V
Maximum cathode current	9 mA
Minimum cathode current	3 mA

Characteristics

Anode-Cathode running voltage at 4.5 mA (Tubes may exhibit jumps of up to 10 V in operation)	95-140 V
Trigger-Cathode running voltage ($R_T=220\text{ k}\Omega$)	
$I_a=0\text{ mA}$	63 V nominal ←
$I_a=4.5\text{ mA}$	73 V nominal ←
Trigger current required to cause the anode to take-over the discharge (anode voltage 290 V)	25 μA nominal ←
De-ionization time	3 mS
Ionization time (with trigger pulsed to +200 V)	90 μS max

Recommended Operating Conditions

Anode supply voltage	180-310 V
Cathode current	4.5 mA
Trigger bias with respect to cathode (Trigger resistor 220 $\text{k}\Omega$)	100 V
Minimum trigger coupling capacitor (Trigger resistor exceeding 200 $\text{k}\Omega$)	150 pF
Minimum ambient illumination	5 ft. candles

N.B.—If tubes stand in the off condition for 150 hours or more, self-ignition may occur at anode voltages above 280, unless a current of 3 mA is passed through all tubes for at least 1 second before commencing normal operation of the circuit.

N.B. ← Indicates a change from previous data sheets.



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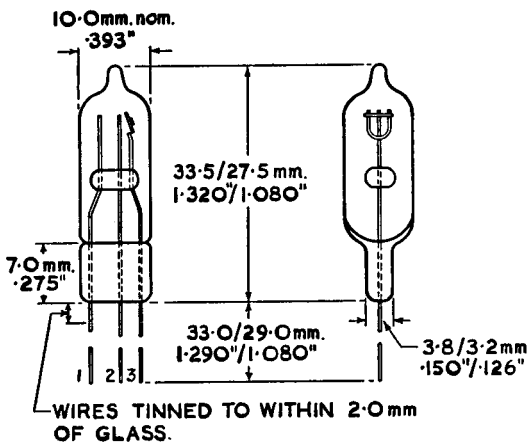
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Mechanical Data

Mounting position	Any
Weight	2.2 g (nominal)
Base	3 flying leads of 0.35 mm. dia. (28 s.w.g.) tinned copper

N.B.—It is recommended that the wires are not soldered or bent nearer than 10 mm. ($\frac{1}{2}$ ") from the glass.



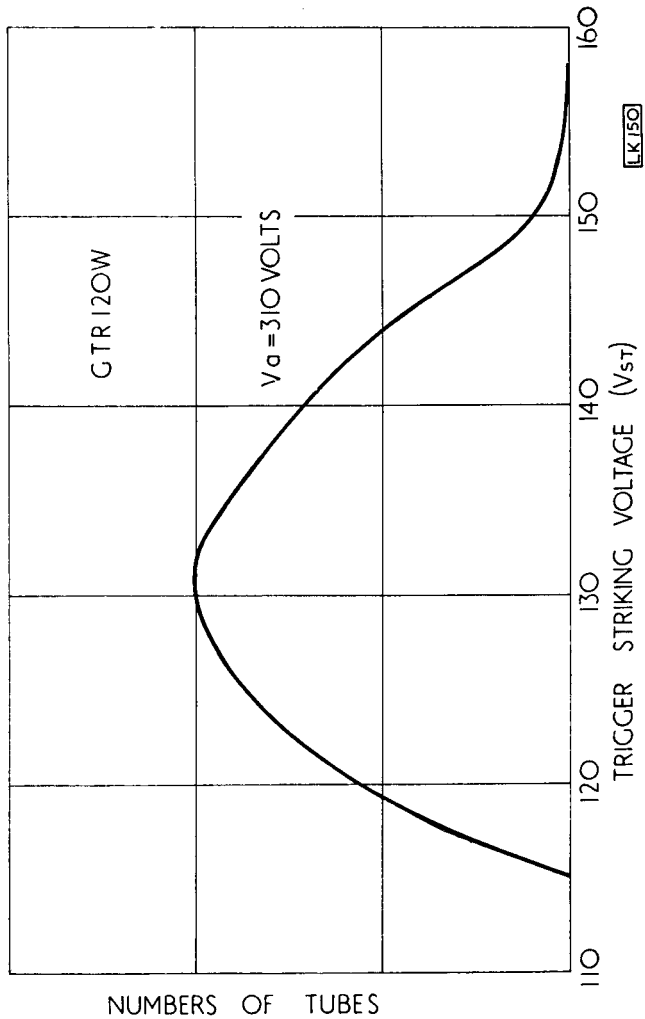
Lead Wires

- 1—Anode
- 2—Trigger
- 3—Cathode

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Distribution of Trigger Striking Volts



