

## Primed Sub-Miniature Trigger Tube

GTE120Y

## Limit Ratings

|                                                                                       |         |
|---------------------------------------------------------------------------------------|---------|
| Maximum anode voltage to prevent self ignition in all tubes                           | + 275 V |
| Minimum trigger voltage necessary to cause trigger breakdown in all tubes             | + 122 V |
| Maximum trigger voltage at which trigger breakdown will not occur in any tube         | + 114 V |
| Minimum primer supply voltage (light or dark, either positive or negative to cathode) | 220 V   |
| Preferred continuous cathode current                                                  | 1—5 mA  |

A current of 0.5—1mA may be used if a rise of up to 10% in trigger striking voltage in 1,000 hours of conduction can be accommodated.

Pulse currents greater than 5mA are permitted. The manufacturers will be pleased to advise on specific cases.

## Characteristics

|                              |                   |
|------------------------------|-------------------|
| Anode running voltage at 2mA | 103—110 V         |
| Trigger running voltage      | 95 V nominal      |
| Primer current               | 8 $\mu$ A nominal |

Primer connected to 250V via 10M $\Omega$ . The resistor must be wired directly to the lead, keeping stray capacitance to a minimum.

|                                                                          |                      |
|--------------------------------------------------------------------------|----------------------|
| Typical trigger current at a voltage just less than the striking voltage | $2 \times 10^{-8}$ A |
|--------------------------------------------------------------------------|----------------------|

Minimum anode voltage to take-over the trigger discharge:—

|                                                    |       |
|----------------------------------------------------|-------|
| (a) $I_t = 30\mu\text{A}$                          | 200 V |
| (b) $C_t = 470\text{pF}$ , $R_t = 1\text{M}\Omega$ | 150 V |

Ionization time, trigger pulsed to 5 V more positive than its striking voltage:—

|                            |             |
|----------------------------|-------------|
| (a) with primer conducting | 100 $\mu$ S |
| (b) primer not connected   | 5mS         |

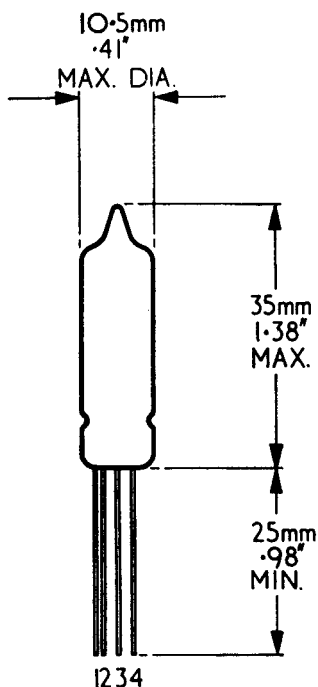
For short pulses, or slowly changing trigger voltage such as occurs in R.C. timers, the primer must be connected. For d.c. switching applications the primer is not required.



**GTE120Y****Primed Sub-Miniature Trigger Tube****Mechanical Data**

Base            4 flying leads of 0.4 mm (.0157") dia. tinned  
copper wire.

The spacing between primer and cathode leads is much less than the other two spacings.



1. Primer
2. Cathode
3. Anode
4. Trigger

