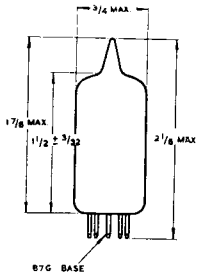
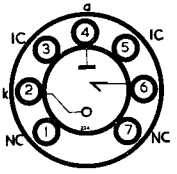



# TYPE **G400/1K** HIGH VOLTAGE COLD CATHODE VOLTAGE STABILISER

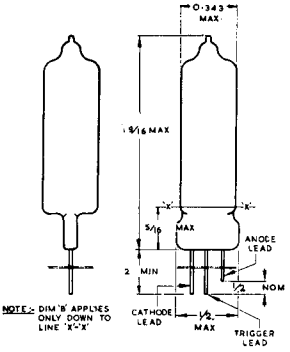



The G400/1K is a miniature low current, high voltage gas-filled stabiliser specially developed for use where a high degree of stability is required.

CHARACTERISTICS

| | | |
|---|---|---|
| Maximum striking voltage ... ... ... ... ... | 400 | V |
| Nominal striking voltage ... ... ... ... ... | 373 | V |
| Stabilising voltage ... ... ... ... ... ... | 304 ± 6 | V |
| Cathode current range ... ... ... ... ... | 2 to 4 | mA |
| Regulation, 2 to 4 mA ... ... ... ... ... | 1.2 | V |
| Voltage stability (over 200 hrs.) ... ... ... ... | ± 1 | V |

NOTE.—In use, pins numbers 4 and 6 must be directly connected together in the external circuit.




# TYPE **G1/236G** SUB MINIATURE COLD CATHODE GAS-FILLED TRIODE

The G1/236G is a three electrode, gas-filled cold cathode triode. It has been designed primarily for "storage" purposes in telephone circuits but has applications in the field of electronic counting.

D.C. CHARACTERISTICS

| | | |
|---|---|---|
| Minimum main gap breakdown voltage ... ... ... | 235 | V |
| Nominal main gap maintaining voltage ... ... ... | 70 | V |
| Maximum control gap breakdown voltage ... ... ... | 85 | V |
| Nominal control gap maintaining voltage ... ... ... | 57 | V |
| Maximum cathode current ... ... ... ... ... | 1.5 | mA |
| Minimum cathode current ... ... ... ... ... | 0.5 | mA |
| Recommended anode voltage ... ... ... ... | 180 | V |
| Maximum trigger resistance ... ... ... ... . | 1.0 | MΩ |

## DYNAMIC CHARACTERISTICS

Transfer

A typical measure of transfer sensitivity is the following:—

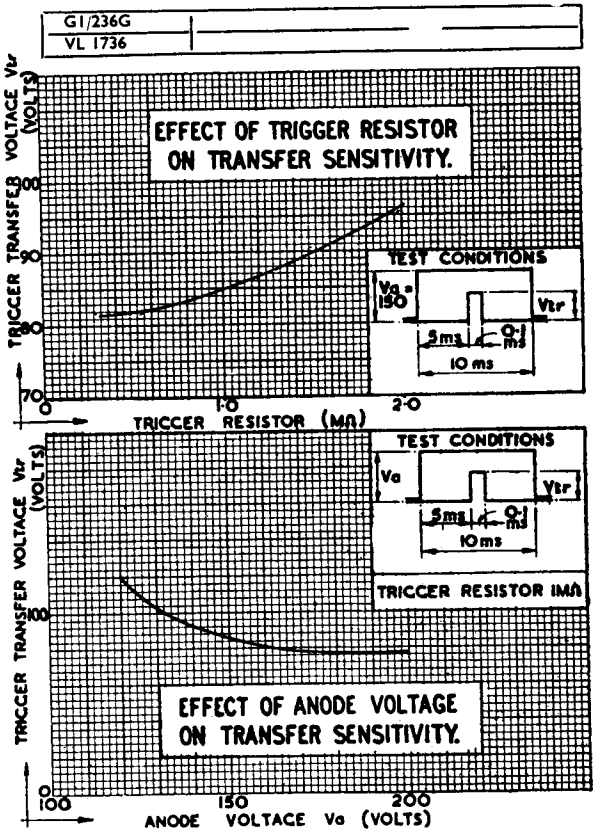
| | | |
|---|---|---|
| Maximum trigger voltage required for main gap breakdown, in the form of a 100 micro-second pulse at $V_a$ 150 volts and $R_t$ 1 megohm * ... ... ... | 95 | V |

* The megohm referred to takes a spread of ± 10% into account. This makes 1·1 megohm an absolute maximum.

## DE-IONISATION

A typical measure of de-ionisation is the following:—

After extinguishing, from a conducting condition limited by 100 kΩ, by pulsing the anode to cathode potential with a square pulse of one milli-second duration, the maximum value of re-applied anode voltage that will not cause the valve to restrike is 200 V.



## GENERAL NOTES

Anode voltages between 150 and 200 volts and a minimum trigger pulse voltage of 95 volts are required to give satisfactory dynamic operation.

If a circuit is used which takes the trigger negative with respect to the cathode at any time, then the ratio of mean cathode current to mean trigger current, when negative, must not be less than 6 to 1. This ratio is a limitation to the value of trigger resistance which should be determined for each such application. If a metal clip is used for anchoring the valve, it should be electrically connected to the trigger.

These valves are light sensitive during operation and should not be exposed to direct sunlight. On the other hand a small measure of light is necessary to ensure satisfactory dynamic operation. If it is desired to use them in a totally enclosed space a small light source should be provided.