VALVE ELECTRONIC

CV2260

GENERAL POST OFFICE: E-IN-C (S)

| Specification: G.P.C./CV2260/Issue 2 | SECURITY | | | |
|-----------------------------------------------------------|---------------|--------------|--|--|
| Dated: January, 1957 | Specification | <u>Valve</u> | | |
| To be read in conjunction with K 1001 ignoring Clause 5.2 | Unclassified | Unclassified | | |

| TYPE OF VALVE: Sub-miniature pentode CATHODE: Directly heated ENVELOPE: Unmetallised glass PROTOTYPE O2DF | MARKING CW 2260 Code date of manufacture Factory identification code. | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------|--|
| Filament voltage (V) Nominal filament current (mA) Max. anode voltage (V) Max. screen voltage (V) Mutual conductance (ua/V) Anode impedance (megohms) Max. cathode current (uA) | 0.625 10.0 45.0 45.0 100.0 1.0 75. | NOTE A A A | BASE B5A (see drawing on page 3) CONNEXIONS (see drawing on page 3) DILENSIONS (see drawing on page 3) | |
| CAPACITANCES (pF) (Unscreened) C ag C in C out | 0.2 1.7 2.4 | | | |

MOLE

A. Measured with Va = Vg2 = 15 and Vg1 = -0.625

A sharp bend must not be made in any valve lead closer than 1.5 mm to the glass seal and soldered joints in the leads must not be made closer than $5.0~\mathrm{mm}$ to the seal.



TESTS (SEC MOROL)

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To be performed in addition to thos applicable in K 1001

| | | TES | T COND | ITIONS | | | LIMITS | | No. Tested | |
|----------|---|-------|-------------|--------|------|---------------------|--------|------------|---------------|------------------|
| | | Vf | Y ht | f(c/s) | Vg1 | | | Min. | Max. | rested |
| | a | 0.625 | - | - | - | If | (mA) | 9.0 | 11.0 | 100% |
| - | ъ | 0.55 | 14 | 50 | - | Gain (Note 2 | (qp) | 25 | | 100% |
| ı | 0 | 0.55 | 14 | 50 | - | Gain (Note 2) | (db) | Note 4 | | Sampling Test |
| I | đ | 0.55 | 14 | 1000 | - | Gain (Note 2) | (db) | Note 5 | | Sampling Test |
| → | е | 0.75 | 14 | 50 | - | Gain (Note 2) | (db) | 25 | | 10 per week |
| -> | f | 0.55 | 14 | 50 | 0.75 | Gain (Note 2) | (db) | 1 8 | | 10 per week |
| -> | g | 0.75 | 18 | 50 | - | Gain (Note 2) | (qp) | 27 | | 10 per week |
| | h | 0.75 | 18 | - | - | Microphony (Note 3) | | | Note 3 | 100% |

NOTES

- The equipment used for testing is to be approved by G.P.O.
- 2. Tested in Test Circuit shown on page 4.
- 5. The input terminals of the test circuit shown on page 4 shall be short circuited and the output terminals shall be connected to an amplifier having an input impedance greater than 50 megohms. The amplifier shall have a gain which does not vary more than ± 2 db over a frequency range from 800 to 4,000 c.p.s. but cuts off sharply above 4,000 c.p.s. The response may fall by 3 db at 600 c.p.s. but not more than 6 db per octave below that. The output of the amplifier shall be connected to a meter having a movement with a period of not less than 3 seconds and not greater than 5 seconds and an over-swing of approximately 15% when connected to the amplifier. The amplifier shall have such a gain that an input of 100 mV. R.M.S. at approximately 1,000 c.p.s. will give a full scale deflection on the output meter.

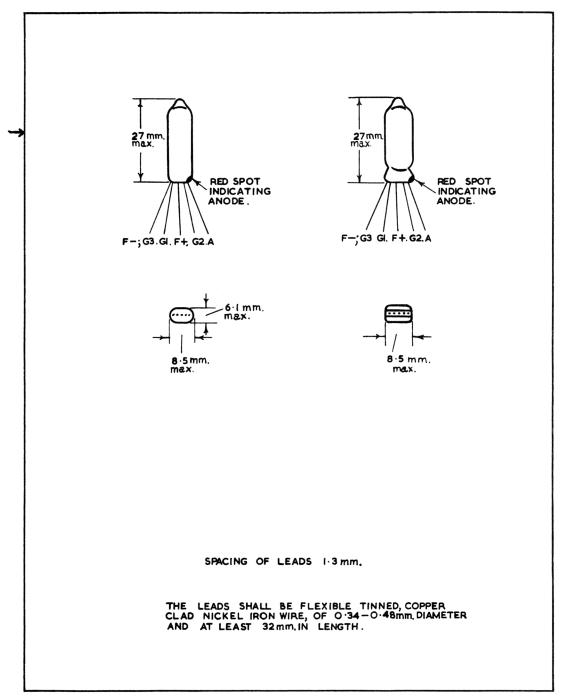
The valve shall be tested for microphony by tapping it steadily with a rubber headed mallet at a rate of approximately 3 times per second in such a direction and position on the valve that the greatest possible sustained microphony response is excited as indicated on the meter. The valve shall be rejected if the meter reading can be maintained at a value exceeding that corresponding to an input of 25 mV R.M.S. at approximately 1,000 c.p.s. (A suggested mallet for tapping the valve is an ordinary lead pencil fitted at one end with a sleeve of india rubber approximately ½" thick).

- 4. With 1.0 Megcims inserted in series with 2,200 pF capacitance in input circuit, the gain to be within 1.0 db of the gain obtained in Test b.
- 5. With 100 pF inserted in series with 2,200 pF capacitance in input circuit, the gain to be within 2.0 db of the gain obtained without the 100 pF inserted.

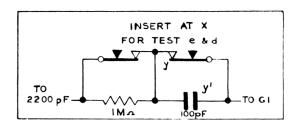
Amilti



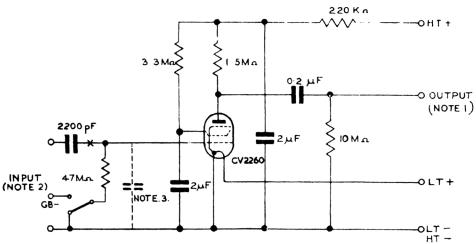
PIN CONNEXIONS & OUTLINE DRAWING.



CV2260



TEST CIRCUIT



- NOTES:- I. OUTPUT IS MEASURED BETWEEN OUTPUT TERMINAL & HT- BY MEANS OF A HIGH IMPEDANCE FULL WAVE VOLTMETER INDICATING AVERAGE VALUES.
 - 2. INPUT NOT GREATER THAN 50 m V.
 - 3. FOR TEST & THE STRAY CAPACITANCE, SHOWN DOTTED, WITH VALVE REMOVED AND CIRCUIT BROKEN AT Y & Y (SEE INSET) TO BE BUILT UP TO 12 pF

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION GPO/CV2260, ISSUE 2, DATED JANUARY 1957 AMENDMENT. NO. 1

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(i) Following "TESTS" delete "(See Note 1)"

(ii) NOTES Delete Note 1 entirely.

July 1966

TVC for GPO