VALVE ELECTRONIC

CV 2106

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

Specification: G.P.O./CV2106/Issue 2 Dated: APRIL 1950 To be read in conjunction with K 1001 ignoring Clause 5.2.	SECURITY Specification: Restricted Valve: Unclassified

——> indicates a change

TYPE OF VALVE: Sub-miniature output pentode
CATHODE: Directly heated
ENVELOPE: Unmetallised Glass
PROTOTYPE DL 66

MARKING

CV 2106
Code date of manufacture
Factory identification code

RATING		NOTE
Filament voltage (V)	1.25	
Nominal filament current (mA)	15.0	
Max. anode voltage (V)	45.0	
Max. screen voltage (V)	45.0	
Mutual conductnace (μA/V)	350	A
Anode impedance (megohms)	0.3	A
Optimum anode load (megohms)	0.075	
Nominal power output (mW)	2.5	A
Max. Cathode current (mA)	800	
CAPACITANCES (pF) (Unscreened)		
C ag	0.2	
C in	2.5	
C out	3.7	

BASE

See drawing on page 3

CONNEXIONS

See drawing on page 3

DIMENSIONS

See drawing on page 3

NOTE

A. Measured with Va = Vg2 = 22.5 and Vg1 = 1.4

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 1.0 ms to the seal.

TESTS (See Note 1)

To be performed in addition to those applicable in K1001

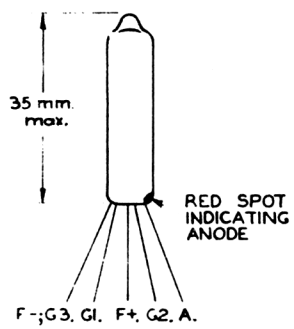
	TEST CONDITIONS			TEST	LIMITS		No. Tested
	Vf	Vht	f(c/s)		Min.	Max.	
a	1.25	-	-	If (mA)	-	16	100%
b	1.5	20	-	Ia (Note 2) (mA)	0.09	0.17	100%
c	1.1	20	1000	Gain (Note 3) (db)	21	-	100%
d	1.1	20	1000	Gain (Note 3) (db)	Note 7		Sampling Test
e	1.5	20	1000	Gain (Note 3) (db)	Note 5		10 per week
f	1.1	30	1000	Gain (Note 3) (db)	Note 6		10 per week
g	1.1	20	1000	Output volts Measured with an input of 2.0 volts (Note 4)	10.0		10 per week

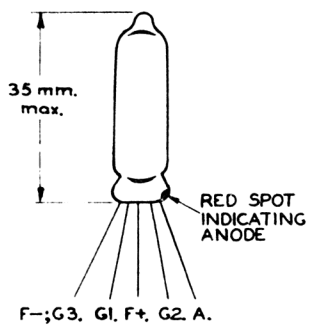
NOTES

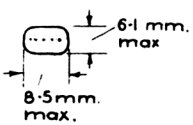
1. The equipment used for testing is to be approved by G.P.O.
2. Measured in anode circuit of Test Circuit shown on page 4.
3. Measured in Test Circuit shown on page 4, and with an input not greater than 100 mV.
4. Measured in Test Circuit shown on page 4.
5. To be not less than the gain obtained in Test C.
6. To be not less than 1.0 db more than the gain obtained in Test C.
7. With 100 pf inserted in series with 820 KΩ resistor in input circuit the gain to be within 2 db of the gain obtained in Test C.

CV2106

PIN CONNEXIONS & OUTLINE DRAWING

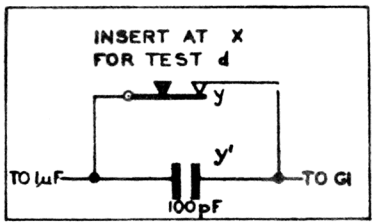




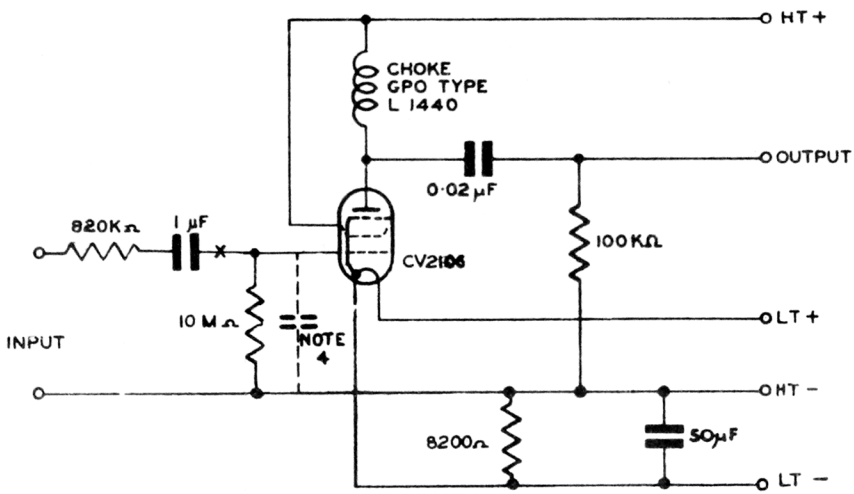


SPACING OF LEADS 1·3mm.

THE LEADS SHALL BE FLEXIBLE 25-27 S.W.G. TINNED, COPPER CLAD NICKEL IRON WIRE, AT LEAST 32 mm IN LENGTH.



TEST CIRCUIT



NOTE 1. OUTPUT IS MEASURED BETWEEN OUTPUT TERMINAL & HT− BY MEANS OF A HIGH IMPEDANCE FULL WAVE VOLTMETER INDICATING AVERAGE VALUES.

2. CHOKE, G.P.O TYPE L 1440 MAY BE OBTAINED ON APPLICATION TO G.P.O.
3. H.T. SOURCE IMPEDANCE TO BE LESS THAN 100 OHMS AT THE TEST FREQUENCY.
4. FOR TEST d THE STRAY CAPACITANCE, SHOWN DOTTED, WITH VALVE REMOVED AND CIRCUIT BROKEN AT y & y' (SEE INSET) TO BE BUILT UP TO 12 pF