

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

Specification: GPO/CV2331/Issue 2 Dated: March 1957. To be read in conjunction with K 1001 ignoring clause 5.2	<u>SECURITY</u>	
	<u>Specification</u> Unclassified	<u>Valve</u> Unclassified

→ indicates a change

<u>TYPE OF VALVE:</u> Subminiature output pentode			<u>MARKING</u>	
<u>CATHODE:</u> Directly heated			CV 2331	
<u>ENVELOPE:</u> Unmetallised glass			Code date of manufacture. Factory identification code.	
<u>PROTOTYPE</u> DL 64.				
<u>RATING</u>		Note	<u>BASE</u>	
Filament voltage (V)	1.25		B5A (See drawing on page 3)	
Nominal filament current (mA)	10	A A B	<u>CONNEXIONS</u> (Note C) (See drawing on page 3)	
Max. anode voltage (V)	45			
Max. screen grid voltage (V)	45			
Max cathode current ( $\mu$ A)	600			
Mutual conductance ( $\mu$ A/V)	180			
Anode impedance ( $K\Omega$ )	400			
Power output ( $\mu$ W)	950			
Optimum anode load ( $K\Omega$ )	100	<u>DIMENSIONS</u> (See drawing on page 3)		
<u>CAPACITANCES</u> (pF)				
Cag.	0.25			
Cin.	2.5			
Cout.	2.4			
<p><b>NOTES</b></p> <p>A. Measured with <math>V_a = V_{g2} = 15V</math> &amp; <math>V_{g1} = -1.5V</math></p> <p>B. Measured with <math>V_a = V_{g2} = 15V</math> &amp; <math>V_{g1} = -1.55V</math> &amp; <math>V_g</math> input = 0.85V r.m.s.</p> <p>C. 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 mm. to the seal.</p>				

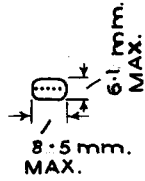
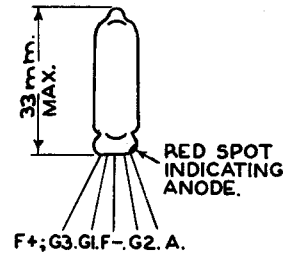
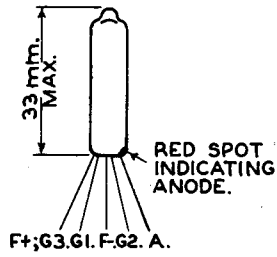
TESTS (See Note 1)

To be performed in addition to those applicable in K 1001.

	Test conditions			Test	Limits		No. Tested	Note
	Vf	Vht	fc/s		Min.	Max.		
a	1.25	-	-	If (mA)	9.0	11.0	100%	
b	1.5	18		Ik (mA)	0.165	0.230	100%	2
c	1.5	18	1000	Output voltage measured with an input of 1 volt r.m.s. (V)	5.0	-	100%	3
d	1.0	18	1000	Output voltage measured with an input of 1 volt r.m.s. (V)	4.5	-	100% or S	3
e	1.0	14	1000	Output voltage measured with an input of 0.5 volt r.m.s. (V)	2.1	-	100% or S	3

- NOTES.
1. The equipment used for testing is to be approved by G.P.O.
  2. Measured in the HT + ve lead of test circuit shown on Page 4.
  3. Measured in Test Circuit shown on Page 4.

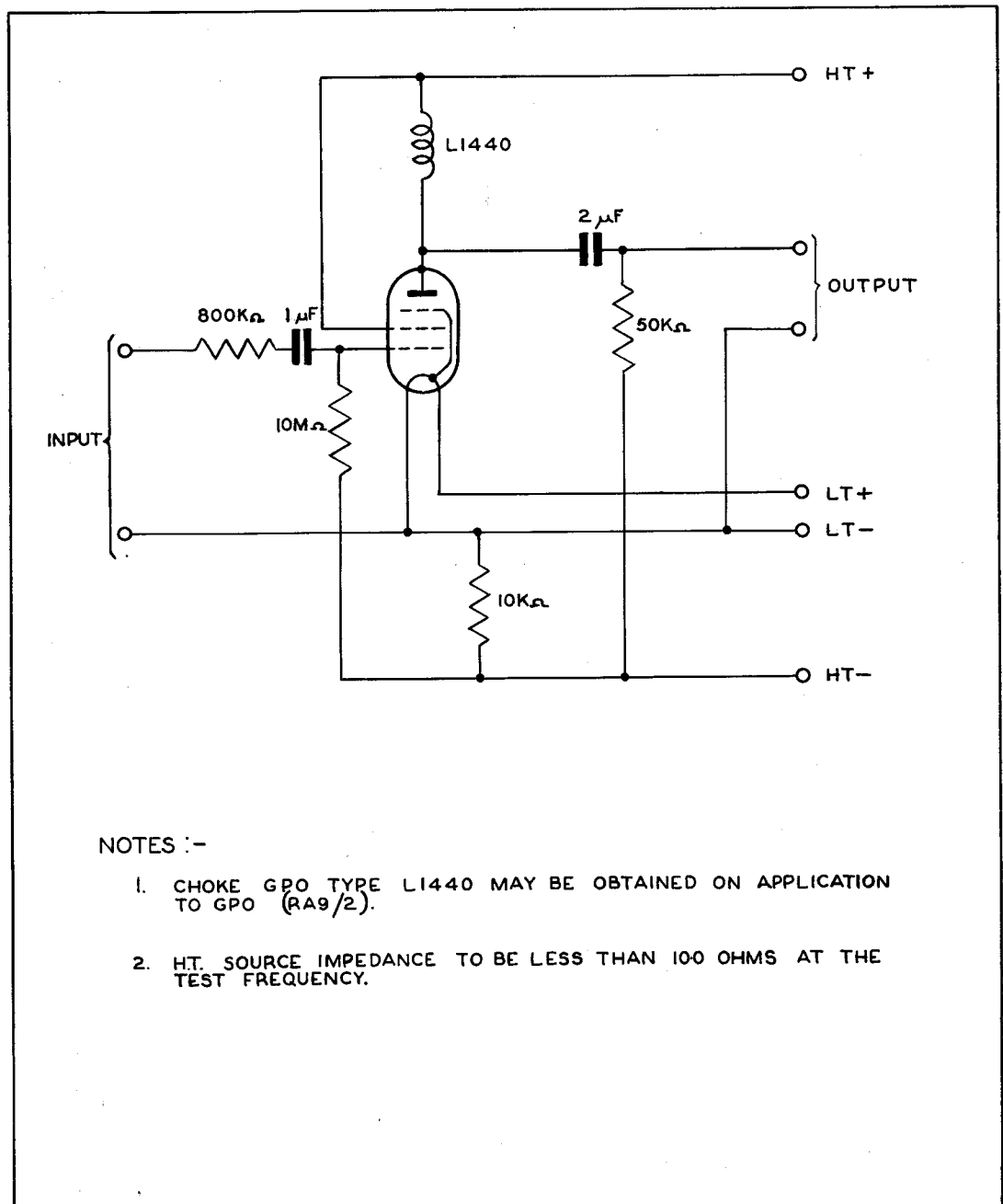
PIN CONNEXIONS &  
OUTLINE DRAWING.



SPACING OF LEADS 1.3mm.

THE LEADS SHALL BE FLEXIBLE 0.34-0.48mm DIAM.  
TINNED, COPPER CLAD NICKEL IRON WIRE, AT  
LEAST 32mm IN LENGTH.

## TEST CIRCUIT.



## NOTES :-

1. CHOKE GPO TYPE L1440 MAY BE OBTAINED ON APPLICATION TO GPO (RA9/2).
2. HT. SOURCE IMPEDANCE TO BE LESS THAN 100 OHMS AT THE TEST FREQUENCY.

CV 233I/2/4