

VALVE ELECTRONIC CV 387

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

Specification: G.P.O./CV 387/Issue 8 Dated: November, 1952. To be read in conjunction with K 1001 ignoring Clause 5.2.	<u>SECURITY</u> <table style="width: 100%; border: none;"> <tr> <td style="border: none; text-align: center;"><u>Specification</u></td> <td style="border: none; text-align: center;"><u>Valve</u></td> </tr> <tr> <td style="border: none; text-align: center;">Unclassified</td> <td style="border: none; text-align: center;">Unclassified</td> </tr> </table>	<u>Specification</u>	<u>Valve</u>	Unclassified	Unclassified
<u>Specification</u>	<u>Valve</u>				
Unclassified	Unclassified				

—————> indicates a change

<u>TYPE OF VALVE:</u> Sub-miniature output pentode <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE</u> CK 506 AX (Raytheon)	<u>MARKING</u> CV 387 Code date of manufacture Factory identification code																		
<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: center; border: none;"><u>RATING</u></th> <th style="text-align: center; border: none;"><u>NOTE</u></th> </tr> </thead> <tbody> <tr> <td style="border: none;">Filament voltage (V) 1.25</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Nominal filament current (mA) 25.0</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Max. anode voltage (V) 45.0</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Max. screen voltage (V) 45.0</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Mutual conductance (mA/V) 0.5</td> <td style="border: none; text-align: center;">A</td> </tr> <tr> <td style="border: none;">Anode impedance (megohms) 0.12</td> <td style="border: none; text-align: center;">A</td> </tr> <tr> <td style="border: none;">Optimum anode load (megohms) 0.03</td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Nominal power output (mW) 25.0</td> <td style="border: none; text-align: center;">A</td> </tr> </tbody> </table>	<u>RATING</u>	<u>NOTE</u>	Filament voltage (V) 1.25		Nominal filament current (mA) 25.0		Max. anode voltage (V) 45.0		Max. screen voltage (V) 45.0		Mutual conductance (mA/V) 0.5	A	Anode impedance (megohms) 0.12	A	Optimum anode load (megohms) 0.03		Nominal power output (mW) 25.0	A	<u>BASE</u> B5A or B8D (See drawing on page 3)
<u>RATING</u>	<u>NOTE</u>																		
Filament voltage (V) 1.25																			
Nominal filament current (mA) 25.0																			
Max. anode voltage (V) 45.0																			
Max. screen voltage (V) 45.0																			
Mutual conductance (mA/V) 0.5	A																		
Anode impedance (megohms) 0.12	A																		
Optimum anode load (megohms) 0.03																			
Nominal power output (mW) 25.0	A																		
	<u>CONNECTIONS</u> See drawing on page 3																		
	<u>DIMENSIONS</u> See drawing on page 3																		
<p style="text-align: center;"><u>NOTE</u></p> <p>A. Measured with $V_a = V_{g2} = 45$, and $V_{g1} = -4.5$</p> <p>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

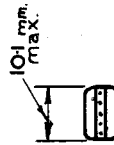
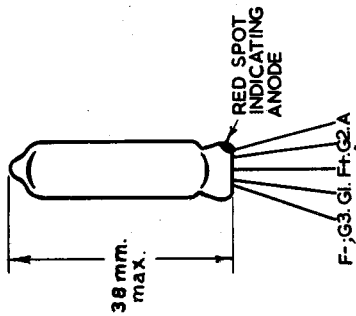
TEST CONDITIONS				TEST	LIMITS		No. Tested
	Vf	Vht	f(c/s)		Min.	Max.	
a	1.25	-	-	If (mA)	-	28	100%
b	1.5	30	-	Ia (Note 2) (mA)	0.9	1.7	100%
c	1.1	30	1000	Gain (Note 3) (db)	13	-	100%
d	1.5	30	1000	Gain (Note 3) (db)	13	-	10 per week
e	1.1	45	1000	Gain (Note 3) (db)	NOTE 5	-	10 per week
f	1.1	30	1000	Output volts Measured with an input (V) of 4.0 volts (Note 4)	8	-	10 per week

NOTES

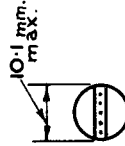
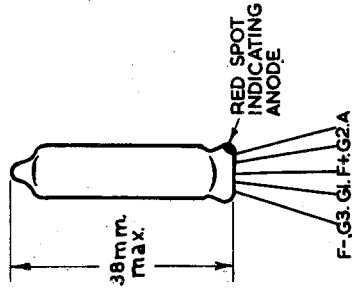
1. The equipment used for testing is to be approved by G.P.O.
2. Measured in anode circuit of Test Circuit shown on page 4
3. Measured in Test Circuit shown on page 4, and with a low input.
4. Measured in Test Circuit shown on page 4.
5. To be not less than the gain obtained in Test C.

PIN CONNEXIONS & OUTLINE DRAWING

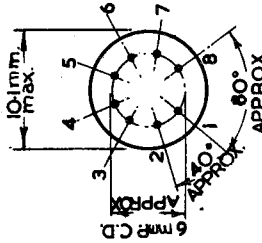
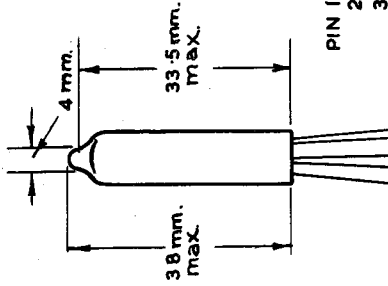
FLAT BULB AND B5A BASE



ROUND BULB AND B5A BASE



ROUND BULB AND B8D BASE



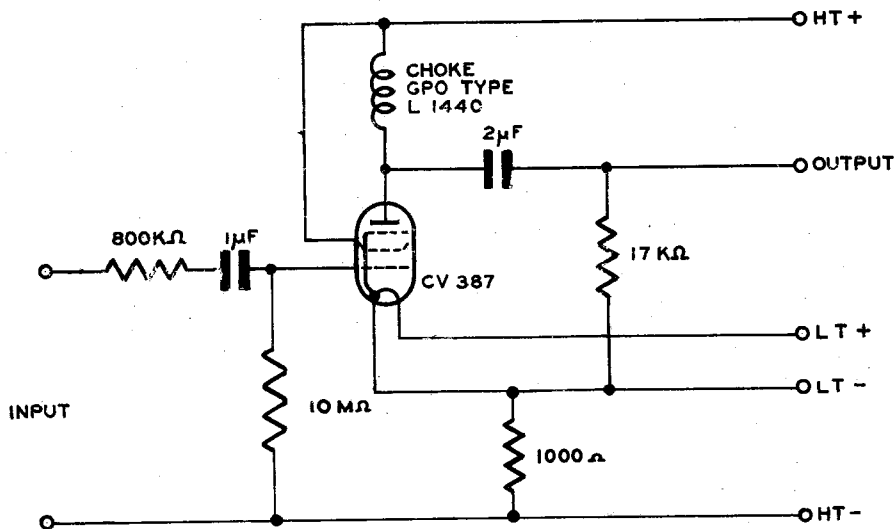
- PIN 1 OMITTED
 - 2 G1
 - 3 OMITTED
 - 4 - FIL & G3
 - 5 +FIL
 - 6 OMITTED
 - 7 A
 - 8 G2
- ANODE CONNEXION ON PIN 7 TO BE INDICATED BY A SUITABLE RED MARK.

VALVE BASE APPROX. $\frac{2}{1}$

SPACING OF LEADS 1.3 mm

THE LEADS SHALL BE FLEXIBLE TINNED, COPPER CLAD NICKEL IRON WIRE, OF 0.34-0.48mm DIAMETER AND AT LEAST 25mm IN LENGTH.

TEST CIRCUIT



- NOTES
1. OUTPUT IS MEASURED BETWEEN OUTPUT TERMINAL & HT -
 2. CHOKE GPO 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. CAPACITANCE BETWEEN HT. - AND LT. - TO BE NOT GREATER THAN 10,000 pF.