VALVE ELECTRONIC

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

CV450

Specification: GPO/CV450/Issue 4	SECURITY	
Dated: Feb. 1954	Specification	Valve
To be read in conjunction with K 1001 →	Unclassified	Unclassified

→ indicates a change

TYPE OF VALVE: Output pentode

CATHODE: Indirectly heated

ENVELOPE: Glass unmetallised

PROTOTYPE EL38

MARKING

See K1001/4

BASE

I.O.

RATING			Note.
Heater voltage	(V)	6.3	
Heater current	(A)	1.4	
Max. anode voltage	(V)	600	
Max. screen voltage	(V)	400	
Mutual conductance	(mA/V)	14.3	1
→ Max. anode dissipation	(W)	25	
→ Max. screen dissipation	(W)	8	

CONNEXIONS

Pin	Electrode
1	G3
2	Heater
3	No connexion
4	G2
5	G1
6	Pin Omitted
7	Heater
8	Cathode
TC	Anode

DIMENSIONS

See K1001/A1/D1

Dimension	Min	Max
A(mm)	-	141
B(mm)	-	54

TOP CAP

See K1001/A1/D5.2 ←

NOTES.

1. Measured with Va = 250 volts, Vg1 = - 7 volts & Vg2 = 250 volts

CV450

TESTS

To be performed in addition to those applicable in K1001

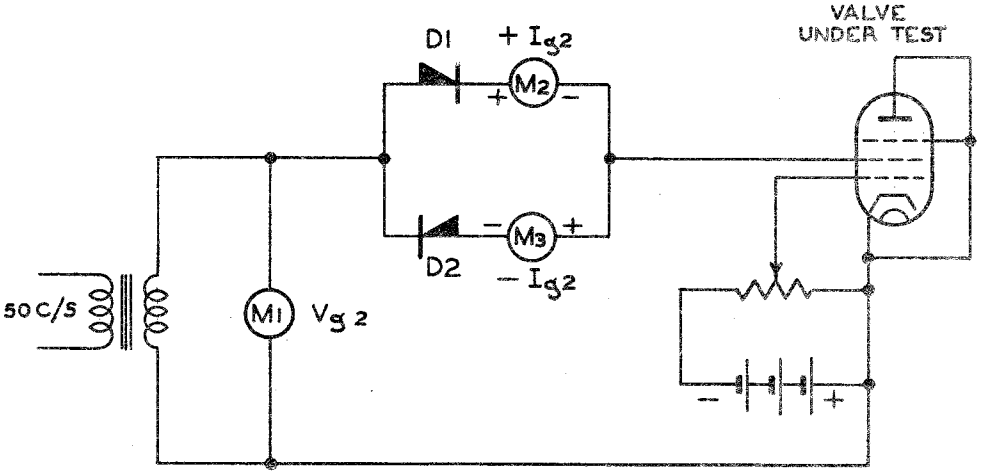
	Test Conditions				Test	Limits		No.	Note
	Vh	Va	Vg2	Vg1		Min.	Max.	Tested	
a	6.3	35	35	35	Ie (mA)	165	-	100%	1
→ b	6.3	250	250	-4	Ia (mA)	125	205	100%	
→ c	6.3	250	250	-10	Ia (mA)	42	82	100%	
d	6.3	250	250	-20	Ia (mA)	-	7	100%	
e	6.3	250	250	-7	Reverse Ig1 (µA)	-	2	100%	2
f	6.3	250	250	-45	Ia (µA)	-	10	100%	3
→ g	6.3	0	250 r.m.s.	Adjust	Reverse Ig2 (µA)	-	750	100% or S.	4

Notes 1. Collecting voltage 35V at 50 c/s.

2. 0.1 megohms protective resistance in series.

3. 1.0 megohms protective resistance in series.

4. Using circuit on Page 3, adjust Vg 1 until meter M2 reads 34 mA. The screen dissipation is then 6 watts. Meter M3 indicates the reverse Ig2.



M1 = AC VOLTMETER (CALIBRATED R.M.S.)
M2 = AC CURRENT METER (R.M.S. READING)
M3 = DC CURRENT METER (MOVING-COIL)
D1, D2 = SUITABLE GERMANIUM CRYSTAL DIODES