MINISTRY OF SUPPLY (S.R.D.E.)

VALVE ELECTRONIC CV234

Specification; MOS/CV234/Issue 3 Dated:- 17.8.48. To be read in conjunction with K1001.	SECURITY Specification ~~Restricted~~ Unclass. Valve Unclassified

——► indicates a change

TYPE OF VALVE:- Velocity modulated magnetically focussed local oscillator
CATHODE:- Indirectly heated
ENVELOPE:- Copper - glass
PROTOTYPE:- DV.56

MARKING

See K1001/4

RATING		Note
Heater voltage (V)	6.3	
Heater current (A)	0.3	
Nominal tuning range (cms)	7.5-15	
Max dissipation anode and resonator (W)	15	
Anode voltage (V)	120-360	A
Resonator voltage (V)	100-340	
Max. screen voltage (V)	340	
Max. resonator dissipation (W)	12	B

BASE
B7G

Pin	Electrode
1	Grid 1
2	Cathode
3	Heater
4	Heater
5	Anode
6	Resonator
7	Grid 2

DIMENSIONS

See page 3

NOTES

A. Anode should be approximately 20V positive to resonator.

B. Screen volts should not at any time exceed resonator volts.

C. A permanent magnet is used to focus the electron beam and is orientated so that maximum current flows to the anode. Locating holes are provided so that the magnetic alignment position is the same for all valves. The magnet should have a uniform field strength of approximately 1,000 oersteds. Jessop magnets types 9501 and 10512 are recommended.

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TESTS

To be performed in addition to those applicable in K1001

	Test Conditions						Test	Limits		No. Tested
	Vh	Vg1	Va	Vg2	Vres	Ic mA		Min	Max	
a	6.3	-	-	-	-	-	Ih (A)	0.27	0.33	100%
b	6.0	0	Set at Vr1 + 10-20V	Adjust Note2	Adjust	54	i)Power output (mW) ii)Resonator voltage(Vr1)	325 235	- 265	100%
c	6.0	0	Set at Vr2 + 10-20V	Adjust Note3	Adjust	75 max	i)Power output (mW) ii)Resonator voltage (Vr2)	325 160	- 190	100%
d	6.6	-200	235-245	150	225	-	Rev.Ig (μA)	-	30	100%
e	6.6	0	235-245	Adjust	225	65	Ig2 (mA) Vg2 (V)	- 80	6.0 200	100%

NOTES

1. Tests b and c shall be carried out in a test set to S.T.& C. Spec. VLS6618 or in another approved test set.

2. Vg2 is adjusted to give Ic = 54 mA, with oscillation at 8.9 cms.

3. Vg2 is adjusted to give Ic = 75 mA max., with oscillation at 11.0 cms.

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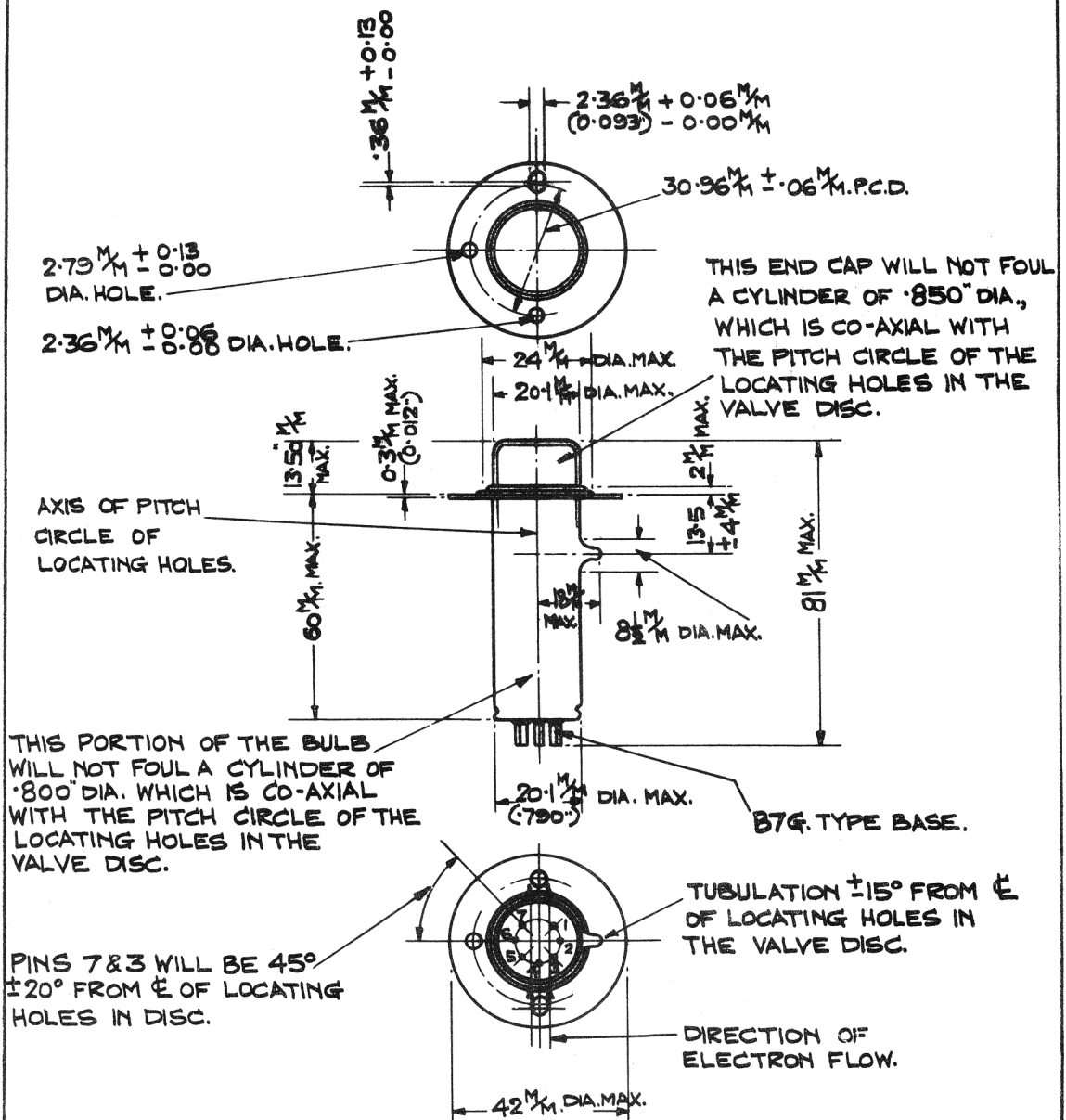
·36 M/M +0·13 −0·00
2·36 M/M + 0·06 M/M (0·093") − 0·00 M/M
30·96 M/M ± ·06 M/M. P.C.D.
2·79 M/M + 0·13 − 0·00 DIA. HOLE.
2·36 M/M + 0·06 − 0·00 DIA. HOLE.
THIS END CAP WILL NOT FOUL A CYLINDER OF ·850" DIA., WHICH IS CO-AXIAL WITH THE PITCH CIRCLE OF THE LOCATING HOLES IN THE VALVE DISC.
24 M/M DIA. MAX.
20·1 M/M DIA. MAX.
13·5 M/M MAX.
0·3 M/M MAX. (0·012")
2 M/M MAX.
AXIS OF PITCH CIRCLE OF LOCATING HOLES.
13·5 ± 4 M/M
60 M/M. MAX.
81 M/M MAX.
8½ M/M DIA. MAX.
THIS PORTION OF THE BULB WILL NOT FOUL A CYLINDER OF ·800" DIA. WHICH IS CO-AXIAL WITH THE PITCH CIRCLE OF THE LOCATING HOLES IN THE VALVE DISC.
20·1 M/M DIA. MAX. (·790")
B7G. TYPE BASE.
TUBULATION ±15° FROM ℄ OF LOCATING HOLES IN THE VALVE DISC.
PINS 7 & 3 WILL BE 45° ±20° FROM ℄ OF LOCATING HOLES IN DISC.
DIRECTION OF ELECTRON FLOW.
42 M/M. DIA. MAX.