

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

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

—————> indicates a change

<u>TYPE OF VALVE</u> :- Velocity modulated magnetically focussed local oscillator  <u>CATHODE</u> :- Indirectly heated <u>ENVELOPE</u> :- Copper - glass <u>PROTOTYPE</u> :- DV.56			<u>MARKING</u>  See K1001/4	
<u>RATING</u>	Note	<u>BASE</u> B7G		
Heater voltage (V)	6.3	Pin	Electrode	
Heater current (A)	0.3	1	Grid 1	
Nominal tuning range (cms)	7.5-15	2	Cathode	
Max dissipation anode and resonator (W)	15	3	Heater	
Anode voltage (V)	120-360	4	Heater	
Resonator voltage (V)	100-340	5	Anode	
Max. screen voltage (V)	340	6	Resonator	
Max. resonator dissipation (W)	12	7	Grid 2	
	A	<u>DIMENSIONS</u>		
	B	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.

CV234

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 Note 2	Adjust	54	i) Power output (mW) ii) Resonator voltage (Vr1)	325 235	- 265	100%
c	6.0	0	Set at Vr2 + 10-20V	Adjust Note 3	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 ( $\mu$ A)	-	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.

