

VALVE ELECTRONIC

CV2242

Specification MOS/CV2242. Issue 2 Dated 4th November, 1957. To be read in conjunction with BSL409 and K1001 excluding clauses 1.2. 5.2. 5.3 and 7.2.		<u>SECURITY</u> <table border="1"> <tr> <td><u>Specification</u></td> <td><u>Valve</u></td> </tr> <tr> <td>UNCLASSIFIED</td> <td>UNCLASSIFIED</td> </tr> </table>		<u>Specification</u>	<u>Valve</u>	UNCLASSIFIED	UNCLASSIFIED																													
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TYPE OF VALVE - Velocity Modulated Oscillator with flexible leads. CATHODE - Indirectly - heated ENVELOPE - Glass - unmetallised PROTOTYPE - VX 7052		<u>MARKING</u> As K1001/4 but with Type Approval letter omitted.																																		
<u>RATINGS</u>		<u>CONNECTIONS</u> See drawing on page 4																																		
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To be performed in addition to those applicable in K1001.

Test Conditions						Test	Limits		No. Tested	Note
	(V)	Frequency (Mc/s)	V _{Ref} (V)	V _{Res} (V)	Mod Pk AC Volts		Min.	Max.		
a	6.3	-	0	0	0	I _h (A)	0.93	1.07	100%	1
b	6.0	5360 (5.6cms)	Adjust V _{Ref1}	Adjust V _{Res1}	0	I _{Res} (mA) V _{Ref1} (V) V _{Res1} (V) Power Output (W)	- -400 - 1.2	64 -500 1100	100%	3, 4, & 5
c	6.0	5360	Set V _{Res1} as in Test (b)	Set V _{Res1} as in Test (b)	100 (200V pk to pk)	Bandwidth (Mc/s) to half power	15	-	100%	4 & 5
d	6.0	5360	As in Test (b)	As in Test (b)	10 (20V pk to pk)	Frequency (Mc/s) Variation	4	-		4, 5 & 6
e	6.0	5250 to 5440	As in Test (b)	As in Test (b)	100	Oscillation should be detected over range				4, 5 & 6
f	6.0	5440 (5.55cms)	Adjust V _{Ref2}	Adjust V _{Res2}	0	I _{Res} (mA) V _{Ref2} (V) V _{Res2} Power Output (mW)	- - - 40	34 -100 600		4 & 5
g	6.0	5400	Set as in Test (f)	Set as in Test (f)	50 (100V pk to pk)	Bandwidth (Mc/s) to half power	20	-		4 & 5
h						Deleted				
j	6.0	5310 to 5500	Set as in Test (f)	Set as in Test (f)	50	Oscillation shall be detected over range				4 & 5

NOTES

- The valve shall be pre-heated for not less than 1 min.
- The valve shall be operated under the conditions specified in Test (b) for 1 min. before reflector current is recorded.
- In Test (b) the maximum value of the resonator current, I_{Res} shall be increased above 64 mA specified when the resonator voltage is less than 1100 volts, according to the following table:-

Resonator Volts	Resonator Current (mA)
1100	64
1050	67
1000	70

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NOTES Cont'd.

4. Tests (b), (c), (d) and (e) must be carried out in approved Test Set.
5. The valve shall be forced air-cooled in all tests, except Test (a) with a minimum air-flow of 7 cu.ft/min.
6. The frequency variation shall be measured about a DC reflector voltage mid-way between the DC reflector voltages corresponding to the half-power points. This point may be estimated visually.

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