

VALVE ELECTRONIC

CV 2220

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

Specification MOS/CV 2220/Issue 3 Dated:- 6.6.52. To be read in conjunction with K1001			SECURITY		
			Specification Unclassified		Valve Unclassified
—————→ indicates a change					
TYPE OF VALVE:- Beam power amplifier CATHODE:- Indirectly heated ENVELOPE:- Glass-unmetallised PROTOTYPE: VX 7097			MARKING See K1001/4		
RATING		Note	BASE B8G		
Heater Voltage (V)	12.0	A A	Pin	Electrode	
Heater Current (A)	0.47		1	Heater	
Max. Anode Voltage (V)	600		2	Anode	
Max. Screen Voltage (V)	300		3	Screen grid	
Max. Anode Current (mA)	120		4	Cathode & Beam plates	
Max. Anode Dissipation (W)	25		5	Control grid	
Max. Screen Dissipation (W)	4.5		6	Control grid	
Mutual Conductance (mA/V)	6.0		7	Cathode & Beam plates	
Inner μ	9.0	A	8	Heater	
Max. Frequency for above ratings (Mc/s)	60		DIMENSIONS See K1001/AI/D1		
CAPACITANCES (pF)			Dimension	Min.	Max.
Cag	0.13		A mm.	-	33.0
Cge	12.0		B mm.	-	31.0
Cae	8.5		L mm.	70.0	78.0
			NOTES A. Measured at $V_a = 300V$. $V_{g2} = 250V$. $I_a = 72 mA$.		

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions					Test	Limits		No. Tested
							Min.	Max.	
a	See K1001/AIII					<u>Capacitances</u> (pF)			
	Links to HP	Links to LP	Links to E						
	2	5,6	1,3,4,7,8,9,10, TC1, TC2			(i) Cag	-	0.2	6
	2	1,3,4,7,8.	5,6,9,10, TC1, TC2.			(ii) Cae	-	10.0	per week
	5,6	1,3,4,7,8.	2,9,10, TC1, TC2.			(iii) Cge	-	13.0	
b	Vh	Va	Vg2	Vg1	Ia (mA)				
	12.0	-	-	-	-	Ih (A)	0.42	0.52	100%
c	12.0	500	300	Ad-just	50	Rev. Ig (μ A) (Note 1)	-	5.0	100%
d	12.0	500	300	-	28	Vg1 (V)	-25	-40	100%
e	12.0	500	300	-	28	Ig2 (mA)	-	2.5	100%
f	12.0	500	300	-75	-	Ia cut-off (mA)	-	1.0	100%
g	12.0	300	300	300	-	Ie (Note 2) (A)	3.5	-	100%

NOTES

1. The duration of this test shall not exceed 3 minutes. After 2 minutes the reverse current to the control grid shall not exceed the value specified and shall not be rising. *control follows.*
2. This test shall be carried out by the application of a 2 μ sec. pulse of 300 volts peak amplitude and 50 c/s. repetition frequency between the cathode and all other electrodes strapped together.

Control: If the control grid current is rising after a two minute test, the test may be continued up to eight minutes, after which time the control grid current shall not exceed the specified maximum and shall not be rising.

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION MOS/CV2220
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AMENDMENT NO.1

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Note 1

Add to Note 1 :-

"If the control grid current is rising after a two minute test, the test may be continued up to eight minutes, after which time the control grid current shall not exceed the specified maximum and shall not be rising".

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T.V.C. for S.R.D.E.

N.33754/D

✓ HPS
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