VALVE ELECTRONIC CV424

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV424/Issue 4.	SECURITY			
Dated: 22. 3. 54. To be read in conjunction with K1001.	Specification Unclassified	<u>Valve</u> Unclassified		

TYPE OF VALVE :- Double R/F Beam Tetrode. CATHODE :- Indirectly Heated. ENVELOPE :- Glass - Unmetallised.			MARKING See K1001/4.			
<u>PROTOTYPE</u> :- QQV-06/40.						
RATING		BASE				
(112)	Note	See drawing, Page 3.				
Heater Voltage (V) Heater Current (A)	6.3 1.8	C	Pin	Electrode		
Max. Anode Voltage (V) Max. Grid Voltage (V) Max. Screen Grid Voltage (V) Max. Cathode Heater Voltage (V) Max. Cathode Current (mA) Max. Peak Cathode Current (mA) Max. Anode Dissipation (W) Max. Grid Dissipation (W) Max. Grid Dissipation (W) Max. Temperature Pins and	600 -175 250 100 120 700 20 3•5 1.0	D D D B B A,B	1 2 3 4 5 6 7 To1 To2	Heater Control Grid (b) Screen Grids (a)(b) Cathode Heater Centre Tap Control Grid (a) Heater Anode (a) Anode (b)		
Bulb	180°C		TOP CAP See drawing, Page 3.			
CAPACITANCES (Nominal)			DIMENSIONS			
Cagt (pF) Cg1c (pF) Cac (pF) C out (pF) C in (pF)	0.06 10.5 3.2 2.0 6.0	B B B	See dr	rawing, Page 3.		

NOTES

- A. The valve may be operated at full ratings up to 150 Mc/s without cooling other than by normal radiation and convection. Above this frequency forced air cooling is required at the rate of 2 cu.ft. per minute up to 250 Mc/s and at 5 cu.ft. per minute from 250-300 Mc/s.
- B. Each section.
- C. Centre tapped 12.6 V Heater.
- D. Absolute maximum values.

TESTS

To be performed in addition to those applicable in K1001.

		Test Conditions						Lin	its	No.	
	Vh (∀)	Va (V)	Vg1 (V)	∀g2 (∀)	Ia (mA)	Test		Min.	Max.	Tested	Note
a	6.3	0	0	0	0	Ih	(A)	1.6	2.0	100%	
ъ	6.3	600	-40	250	-	Ia	(mA)	-	5	100%	1
o	6.3	600	-24	250	-	Ia	(mA)	18	52	100%	1
đ	6.3	600	-16	250	-	Ia	(mA)	60	130	100%	1
•	6.3	600	Adjust	250	40	Ig ₁	(AA)	-	- 12	100%	1,2
f	6.3	600	Adjust	250	40	Ig2	(mA)	-	6	100%	1
g	6.3	Anode, grid and screen grid strapped and 50 V 50 cycles applied.			Ie	(mA)	125	-	100%	1	
h	To be carried out at 300 Mc/s. (Ig2 should be 4-9 mA each) section)				Amplifier Test	(₩)	35	-	100%	3	
j						Capacitances Cac (each sectidifference betweetions not to exceed 0.5 pF. Caab Cgab (each sections)	reen	2.8 0.35 9.5 1.0	3.7 0.55 12.0 1.5	6 per week	

NOTES

- 1. Tests to be applied to each half of valve, control grid of unit not under test being connected to $-100\ V_{\bullet}$
- Reading to be made after 3 minutes operation.
- P load at circuit transfer efficiency = 73%.

