

VALVE ELECTRONIC

CV2411

GENERAL POST OFFICE: E-IN-C (S)

Specification: GPO/CV 2411/Issue 1	<u>SECURITY</u>	
Dated: December, 1956.	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001, BS 448 & BS 1409.	Unclassified	Unclassified

<u>TYPE OF VALVE:</u> Output pentode <u>CATHODE:</u> Indirectly Heated <u>ENVELOPE:</u> Glass unmetallised <u>PROTOTYPE</u> VX 8194				<u>MARKING</u> See K 1001/4 <u>BASE</u> BS 448/B9A					
<u>RATING</u>				<u>CONNECTIONS</u>					
				<u>Pin</u>	<u>Electrode</u>				
Heater voltage	(V)	12.6		1	IC				
Heater current	(A)	0.150		2	g ¹				
Max. anode voltage (I _a = 0)	(V)	550	A	3	k, g ³				
Max. screen grid voltage (I _{g2} = 0)	(V)	275	A	4	h				
Max. anode operating voltage	(V)	275	A	5	h				
Max. screen grid operating voltage	(V)	275	A	6	IC				
Max. anode dissipation	(W)	9.5	A	7	a				
Max. screen grid dissipation	(W)	2.0	A	8	g ²				
Anode current	(mA)	27	B	9	h tap				
Screen grid current	(mA)	1.9	B						
Mutual conductance	(mA/V)	3.2	B						
Inner amplification factor		8.5	B						
Max. cathode current	(mA)	42	A						
Max. heater-cathode voltage	(V)	65	A						
Power output	(mW)	80	D						
				<u>DIMENSIONS</u> See BS 448/B9A/2.1 Size Ref. 3					
				Dimension (m.m)	Min.	Max.			
				A seated height	-	60.5			
				C Diameter	19	22.2			
				D overall length	-	67.5			
<u>CAPACITANCES.</u>									
C _{ag} . (max.)	(pF)	0.75	C						
C in.		7.5	C						
C out.		6.2	C						
<u>NOTES.</u>									
A. Absolute maximum values B. Measured at V _a = V _{g2} = 250 volts and R _k = 550 ohms C. Measured without metal screen D. Measured at V _a = V _{g2} = 50 volts, V _{g1} = 3.3 volts, R _a = 12.5K ohms and V in = 1.8 volts r.m.s.									

CV2411

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS							TEST	LIMITS		AQL	INSP-LEVEL	NOTE
	Links to H.P.	Links to L.P.	Links to E.	MIN	MAX								
a	7	2	1,3,4,5,6,8,9.	Cag (pF)	-	0.75		20	1				
	2	1,3,4,5,6,8,9.	7	C in (pF)	7.1	7.9		per					
	7	1,3,4,5,6,8,9.	2	C out (pF)	5.7	6.7		week					
	Vh (V)	Va (V)	Vg 2 (V)	Vg 1 (V)	Ra (Kohms)	V in (Vrms)	Rk (ohms)						
b	12.6							Ih (A)	0.138	0.162		100% or S	
c	12.6	250	250				550	Ia (mA)	18	36		100%	
d	12.6	250	250				550	Ig2 (mA)	-	3.0 5.0		100%	
e	12.6	250	250				550	-Ig1 (uA)	-	1.0		100%	
f	12.6	250	250				550	gm (mA/V)	2.4	4.0		100%	
g	12.6	250	250	-32.5				Ia (mA)	-	4.0		100%	
h	12.6	250	250				550	Inner u	6.0	11.0	6.5	IB	2
j	12.6	50	50	- 3.5	12.5	1.8		Power output (mW)	65	-	2.5	IA	

NOTES.

1. Measured without metal screen
2. Alternative test may be made at Vg1 = -17.5 volts

AMENDMENT NO. 1

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Test (d)

Amend 3 mA Max limit to read 5 mA Max. limit.

August, 1957

T.V.C.
for G.P.O.

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ATM

N5022R