

VALVE ELECTRONIC **CV 1699**GENERAL POST OFFICE: E-IN-C (S)

(POVT 150)

Specification: G.P.O./CV 1699/Issue 2 Dated: 24th June 1949 To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Restricted

→ indicates a change

<u>TYPE OF VALVE:</u> R. F. Pentode			<u>MARKING</u> See K 1001/4			
<u>CATHODE:</u> Indirectly heated			<u>BASE</u> Mazda Octal (M.O.)			
<u>ENVELOPE:</u> Metallised glass						
<u>PROTOTYPE</u> SP 41						
<u>RATING</u>			Note	<u>CONNEXIONS</u>		
				Pin	Electrode	
Heater voltage	(V)	4.0	A	1	Heater	
Nominal heater current	(A)	0.95		2	Cathode	
Max. anode voltage	(V)	250		3	Anode	
Max. screen voltage	(V)	250		4	G2	
Mutual conductance	(mA/V)	8.5		5	G3	
				6	Metallising	
			7	Pin omitted		
			8	Heater		
			T.C	G1		
<u>CAPACITANCES (pF)</u>				<u>TOP CAP</u> See K 1001/A1/D5.1		
Cag	(max)	0.02		<u>DIMENSIONS</u> See K 1001/A1/D1		
Cae	(max)	6.0				
Cge	(max)	12.0				
				Dimension	Min.	Max.
				A (mm)	-	95
				B (mm)	-	33
<u>NOTE</u>						
A. Measured with $V_a=200$ , $V_{g1} = -1.5$ , and $V_{g2} = 200$						

## TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Note	
								Min.	Max.			
	See K 1001/A III											
(a)	Links to H.P	Links to L.P	Links to E	<u>CAPACITANCES (pF)</u>								
	3	TC1	1,2,4,5,6,7,8,9,10,TC2	(i) Cag			-	0.02	6	per week		
	3	1,2,4,5,6,8.	7,9,10,TC1, TC2	(ii) Cae			-	6.0	6	per week		
	TC1	1,2,4,5,6,8.	3,7,9,10,TC2	(iii) Cge			-	12.0	6	per week		
(b)	Test Voltage						<u>INSULATION</u>					
	-						(i) Heater and cathode	-	-	1%	1	
	20 Volts D.C						(ii) Cathode & G1 (MΩ)	60	-	1%		
	250 Volts D.C						(iii) Between all other electrodes (MΩ)	500	-	1%		
	Vh	Va	Vg1	Vg2	Vg3	Ia (mA)						
(c)	4.0	0	0	0	0	0	Ih (A)	0.9	1.0	100%		
(d)	4.0	200	-1.5	200	0	-	Reverse Ig1 (μA)	-	0.5	100%		
(e)	4.0	200	-1.5	200	0	Read	Ia (mA)	9.0	12.0	100%		
(f)	4.0	200	-1.5	200	0	-	Ig2 (mA)	1.9	3.2	100%		
(g)	4.0	200	Note 2	200	0	-	gm (mA/V)	7.1	8.5	100%	2	

### NOTES

1. To be performed in accordance with K1001/5.3
2. Vg1 changed from - 1.7V to - 1.3V