

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

(POVT 150)

Specification: G.P.O./CV 1699/Issue 2 Dated: 24th June 1949 To be read in conjunction with K 1001	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td><u>Specification</u></td><td><u>Valve</u></td></tr> <tr> <td>Restricted</td><td>Restricted</td></tr> </table>	SECURITY		<u>Specification</u>	<u>Valve</u>	Restricted	Restricted
SECURITY							
<u>Specification</u>	<u>Valve</u>						
Restricted	Restricted						

—————> indicates a change

<u>TYPE OF VALVE:</u> R. F. Pentode				<u>MARKING</u>		
<u>CATHODE:</u> Indirectly heated				See K 1001/4		
<u>ENVELOPE:</u> Metallised glass				<u>BASE</u>		
<u>PROTOTYPE</u> SP 41				Mazda Octal (M.O.)		
<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>		
Cag (max) 0.02			See K 1001/A1/D5.1			
Cae (max) 6.0			<u>DIMENSIONS</u>			
Cge (max) 12.0			See K 1001/A1/D1			
				Dimension	Min.	Max.
				A (mm)	-	95
				B (mm)	-	33
<u>NOTE</u>						
A. Measured with Va=200, Vg1 = -1.5, and Vg2 = 200						

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Notes
								Min.	Max.		
(a)	See K 1001/A III						<u>CAPACITANCES (pF)</u>				
	Links to H.P	Links to L.P	Links to E								
	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 (M Ω)	60	-	1%	
	250 Volts D.C						(iii) Between all other electrodes (M Ω)	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 (μ A)	-	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