

VALVE ELECTRONIC

CV 1657

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

(POVT 79A)

Specification: G.P.O./CV 1657/Issue 1 Dated: 30-9-46 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: Triode</u> <u>CATHODE: Directly heated</u> <u>ENVELOPE: Unmetallised glass</u> <u>PROTOTYPE 4020 B</u>			<u>MARKING</u> See K 1001/4		
<u>RATING</u>		Note	<u>BASE</u> British 4-pin (B4)		
Filament current	(A) 0.25		<u>CONNECTIONS</u>		
Nominal filament voltage	(V) 2.0		Pin	Electrode	
Max. anode voltage	(V) 160		1	Anode	
Amplification factor	30.0	A	2	Grid	
Mutual conductance	(mA/V) 0.6	A	3	Filament -	
Anode impedance	(ohms) 50,000	A	4	Filament +	
<u>CAPACITANCES (pF)</u>			<u>DIMENSIONS</u>		
C _{ag}	(max) 10.0		See K 1001/A1/D1		
C _{ae}	(max) 10.0		Dimension	Min.	Max. <i>as usual</i>
C _{ge}	(max) 10.0		A (mm)	-	14 120
			B (mm)	-	57 46
<u>NOTE</u>					
A. Measured with V _a = 130, and V _g = -1.5 B. The plane of the anode and grid pins shall lie within 25° of the plane of the filament.					

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note	
					Min.	Max.			
(a)	See K 1001/A III			<u>CAPACITANCES (pF)</u>					
	Links to H.P.	Links to L.P.	Links to E						
	1	2	3,4,5,6,7,8,9,10,TC1,TC2		(i) C _{ag}	-	10.0	6 per week	
	1	3,4	2,5,6,7,8,9,10,TC1,TC2		(ii) C _{as}	-	10.0	6 per week	
	2	3,4	1,5,6,7,8,9,10,TC1,TC2	(iii) C _{ge}	-	10.0	6 per week		
(b)	Test Voltage 500 Volts D.C.			<u>INSULATION (megohms)</u>					
				(i) Anode to filament	100	-	1%		
				(ii) Between any other two electrodes	500	-	1%		
				(iii) Between any electrode and metallic shell of the base	500	-	1%		
	I _f (A)	V _a	V _g						
(c)	0.25	-	-	V _f (V)	1.8	2.2	100%		
(d)	0.25	130	- 1.5	R _a "x" (ohms)	40,000	60,000	100%		
(e)	0.25	130	- 1.5	R _a "y" (ohms)	-	1.2"x'	100%	1	
(f)	0.25	130	- 1.5	μ	25.0	35.0	100%		
(g)	0.25	130	- 1.5	Reverse I _g (μA)	-	0.5	100%		
(h)	0.25	130	- 7	I _a (μA)	-	1.5	100%		
<u>NOTE</u>									
1. Re-adjust I _f with V _a = V _g = 0									