

VALVE ELECTRONIC **CV 1607**

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

(POWT 16)

Specification: <b>G.P.O./CV1607/Issue 1</b> Dated: <b>18-9-46</b> To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> <b>Restricted</b>	<u>Valve</u> <b>Restricted</b>

—————> indicates a change

<u>TYPE OF VALVE:</u> <b>Transmitting triode</b>		<u>MARKING</u> See K 1001/4 Additional markings required (See notes A & B) Serial No. ....		
<u>CATHODE:</u> <b>Directly heated tungsten filament</b>		<u>BASE</u> None (flexible leads)		
<u>ENVELOPE:</u> <b>Silica (tungsten seals)</b>				
<u>PROTOTYPE</u> <b>----</b>				
<u>RATING</u>				
		<u>Note</u>	<u>CONNECTIONS</u> The anode lead shall be brought out at one end of the valve and the filament and grid leads at the other end.  The length of leads shall be at least 12 inches.	
Filament current	(A)	40.0		
Nominal filament voltage	(V)	18.0		
Max. anode voltage	(kV)	10.0		
Max. anode dissipation	(kW)	2.5		
Max. operating frequency	(kc/s)	500		
Amplification factor		60.0		C
Anode impedance	(k/ohms)	21.0		C
			<u>DIMENSIONS</u> Max. overall length excluding leads <span style="float: right;">550 mm</span> Max. diameter <span style="float: right;">120 mm</span>	

NOTES

- A. The Serial Numbers will be allotted by the Inspecting Officer.
- B. It is not essential that the additional marking shall appear within the frame.
- C. Measured with  $V_a = 12$  kV, and  $I_a = 200$  mA.

TESTS

The tests shown in Table I, or, alternatively, those shown in Table II shall be performed in addition to those applicable in K 1001

TABLE I (for A.C. filament heating).

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	If (A)	Va (kV)	Vg (V)	Ia (mA)		Min.	Max.		
(a)	40	-	-	-	Vr (V)	17.0	19.0	100%	
(b)	40	12.5	Adjust	200	Reverse Ig ( $\mu$ A)	-	75.0	100%	1
(c)	40	10	Read	200	$\mu$	51.0	69.0	100%	
		14	Read						
(d)	40	9.5	Read	200	Vg (V)	-10.0	-50.0	100%	

TABLE II (for D.C. filament heating).

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	If (A)	Va (kV)	Vg (V)	Ia (mA)		Min.	Max.		
(a)	40	-	-	-	Vr (V)	17.0	19.0	100%	
(b)	40	12.5	Adjust	200	Reverse Ig ( $\mu$ A)	-	75.0	100%	1
(c)	40	10	Read	200	$\mu$	51.0	69.0	100%	
		14	Read						
(d)	40	9.5	Read	200	Vg (V)	-1.0	-41.0	100%	

NOTE

- The duration of test (b) shall be 15 minutes and the reverse grid current shall not be rising after the first 5 minutes.