

VALVE ELECTRONIC **CV1708**GENERAL POST OFFICE: E-IN-C ( W )

(POVT 159)

Specification: <b>G.P.O./CV1708/Issue 1</b>	<u>SECURITY</u>	
Date: <b>19.3.47</b>	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	<b>Restricted</b>	<b>Restricted</b>

... indicates a change

<u>TYPE OF VALVE:</u> Full wave vacuum rectifier				<u>MARKING</u>  See K1001/4			
<u>CATHODE:</u> Indirectly heated							
<u>ENVELOPE:</u> Unmetallised glass							
<u>PROTOTYPE:</u> 80							
<u>RATING</u>				Note	<u>BASE</u>  U.S. Medium 4-pin (U.S.M.4)		
					<u>CONNEXIONS</u>		
Heater voltage (V) 5.0				A	Pin	Electrode	
Nominal heater current (A) 2.0					1	Heater & Cathode	
Max. anode voltage R.M.S. (V) 400					2	Anode 1	
Max. rectified current (mA) 110					3	Anode 2	
					4	Heater	
					<u>DIMENSIONS</u>  See K1001/A1/D3		
					Dimension	Min.	Max.
					A (mm)	-	112
					B (mm)	-	46

NOTE

A. Measured with 400 volts R.M.S. per anode.

TESTS

To be performed in addition to those applicable in K1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note
	Vh(V)	Val(DC)	Va2(DC)		Min.	Max.		
(a)	5.0	-	-	Ih (V)	1.85	2.15	100%	1
(b)	5.0	75	-	Ie1 (mA)	120.0	155.0	100%	1
(c)	5.0	-	75	Ie2 (mA)	120.0	155.0	100%	1
(d)	5.0	550 volts R.M.S. per anode		Total rectified output current (mA)	130.0	-	100%	1,2

NOTES

1. Before commencing the tests, the valve shall be pre-heated for 10 minutes, the heater voltage being adjusted to 5 volts with all other electrodes disconnected.
2. This test shall be conducted in a bi-phase half-wave circuit, and its duration shall be 15 minutes. A reservoir capacitor of 4  $\mu\text{F}$ , shunted by a load resistance of 4,000 ohms, shall be used.