

VALVE ELECTRONIC **CVI643**GENERAL POST OFFICE: E-IN-C (S)

(POVT 37B)

Specification: G.P.O./CVI643/Issue 2	<u>SECURITY</u>	
Dated: 12.12.46	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

-----> indicates a change

<u>TYPE OF VALVE:</u> Triode <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE</u> E 152				<u>MARKING</u> See K1001/4		
<u>RATING</u>				<u>Note</u>	<u>BASE</u> Bayonet cap 4-pin (BC4) See drawing on page 3 and Note B.	
Filament current	(A)	0.82			<u>CONNECTIONS</u>	
Nominal filament voltage	(V)	2.0			<u>Pin</u>	<u>Electrode</u>
Max. anode voltage	(V)	150			1	Grid
Mutual conductance	(mA/V)	0.55	A		2	Filament -
Amplification factor		30.0	A		3	Filament +
Anode impedance	(ohms)	55,000	A		4	Anode
					<u>DIMENSIONS</u> See K1001/A1/D1	
					<u>Dimension</u>	<u>Min.</u> <u>Max.</u>
					A (mm)	- 127
					B (mm)	- 65

NOTEA. Measured with $V_a = 130$, and $V_g = -1.5$ B. The axis of the bayonet locating pin shall lie within 25° of the plane of the filament.

TESTS

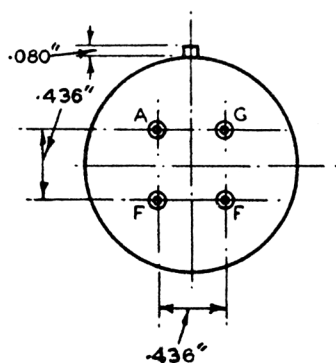
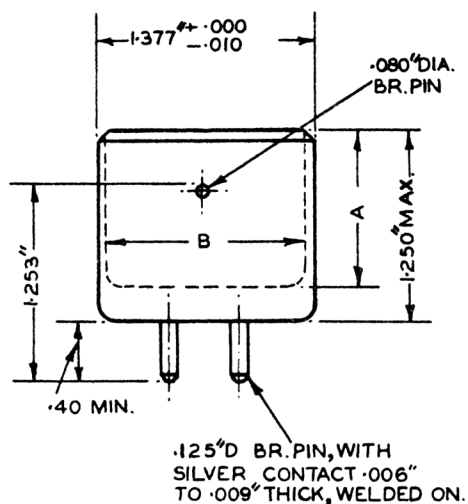
To be performed in addition to those applicable in K1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note
					Min.	Max.		
(a)	Test Voltage 500 Volts, D.C.			<u>Insulation (megohms)</u>				
				(i) Anode to filament	100	-	1%	
				(ii) Anode to grid	500	-	1%	
				(iii) Grid to filament	500	-	1%	
	If(A)	Va	Vg					
(b)	0.82	-	-	Vf (V)	1.8	2.2	100%	
(c)	0.82	130	-1.5	Reverse Ig (μ A)	-	0.1	100%	
(d)	0.82	130	-1.5	Ra (ohms)	44,000	66,000	100%	
(e)	0.82	130	-1.5	μ	25.0	55.0	100%	
(f)	0.82	150	-7	Ia (μ A)	-	1.5	100%	
(g)	-	130	0	Vf (V)	-	1.3	100%	1

NOTE

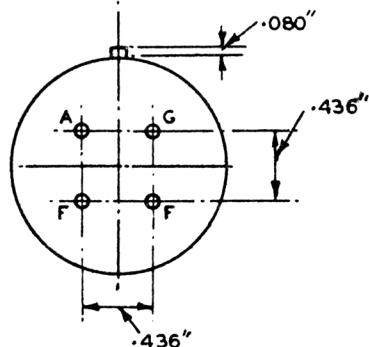
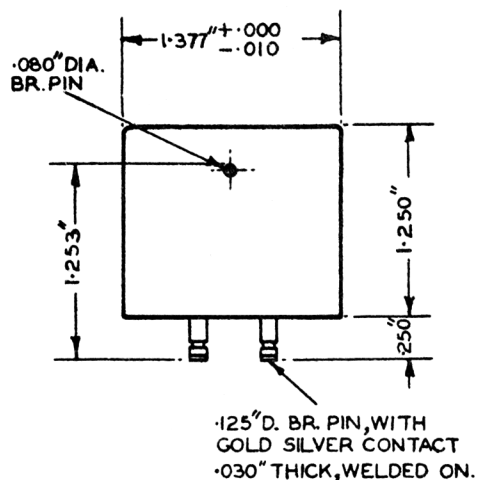
1. Vf to be adjusted to give Ia = 0.5 mA.

OUTLINE DRAWING



INTERNAL DIMENSIONS A & B
TO SUIT MANUFACTURERS
REQUIREMENTS.

FIG. 1. MOULDED TYPE.



MATERIAL:— NI. P. BRASS CYLINDER
WITH MOULDED INTERIOR.

FIG. 2. METAL SHELL TYPE. .