

VALVE ELECTRONIC **CVI644**GENERAL POST OFFICE: E-IN-C (S)

(POVT 37C)

Specification: G.P.O./CVI644/Issue 3	<u>SECURITY</u>	
Dated: 12.2.46	<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>MARKING</u>			
<u>CATHODE:</u> Directly heated							
<u>ENVELOPE:</u> Unmetallised glass				See K1001/4			
<u>PRCTOTYPE</u> E1532							
<u>RATING</u>				<u>BASE</u>			
				Bayonet cap 4-pin (BC4)			
				See drawing on page 3			
				and Note C.			
				<u>CONNEXIONS</u>			
				<u>Pin</u>		<u>Electrode</u>	
Filament-plus-shunt current (A) 0.82				A		1 Grid	
Nominal filament voltage (V) 2.0						2 Filament -	
Max. anode voltage (V) 150						3 Filament +	
Mutual conductance (mA/V) 0.6				B		4 Anode	
Amplification factor 30.0				B			
Anode impedance (ohms) 50,000				B			
				<u>DIMENSIONS</u>			
				See K1001/A1/D1			
				<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
				A (mm)		-	127
				B (mm)		-	65

NOTES

- A. This valve has an internal shunt connected across the filament and the combination is designed to operate with a total current of 0.82 amps at a nominal voltage of 2 volts.
- B. Measured with $V_a = 130$ and $V_g = -1.5$
- C. The axis of the bayonet locating pin shall lie within 25° of the plane of the filament.

TESTS

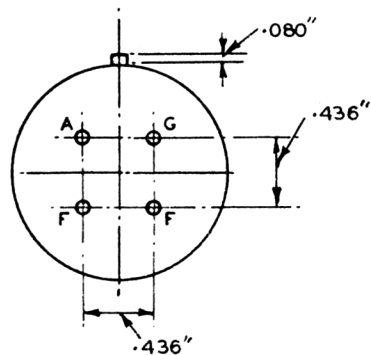
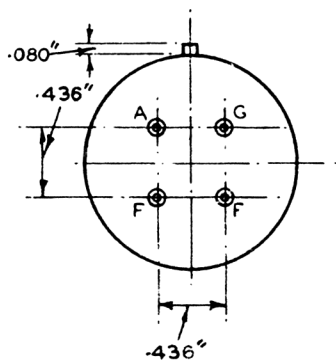
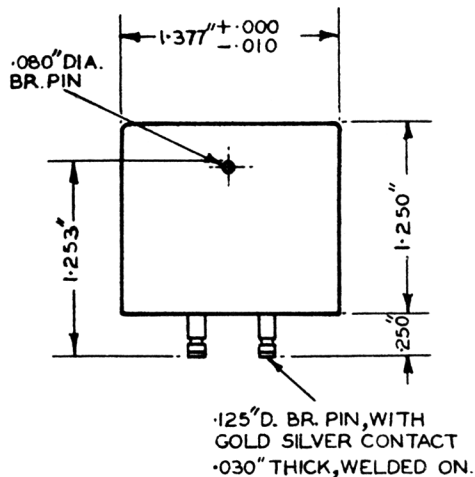
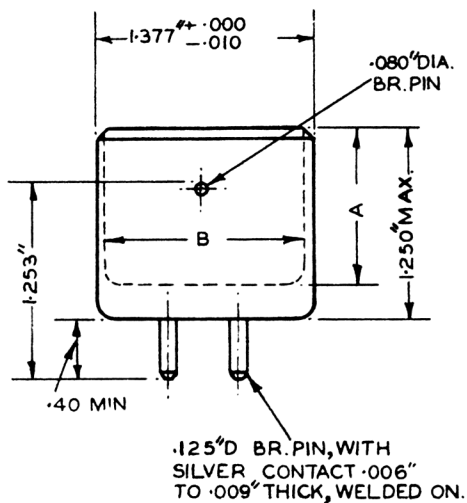
To be performed in addition to those applicable in K1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note
	If (A)	Va	Vg		Min.	Max.		
(a)	0.82	-	-	Vf (V)	1.8	2.2	100%	1
(b)	0.82	130	-1.5	Reverse Ig (μ A)	-	0.5	100%	1
(c)	0.82	130	-1.5	Ia (mA)	0.6	1.1	100%	1
(d)	0.82	130	-1.5	μ	25.0	35.0	1%	1
(e)	0.82	130	-7.0	Ia (μ A)	-	1.5	100%	1
(f)	0.82	130	-1.5	gm (mA/V)	0.48	0.72	100%	1

NOTE

1. If = 0.82A is the combined filament and shunt current.

OUTLINE DRAWING



INTERNAL DIMENSIONS A & B
TO SUIT MANUFACTURERS
REQUIREMENTS.

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

FIG. 1. MOULDED TYPE.

FIG. 2. METAL SHELL TYPE.