

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

(POVT 132)

Specification: G.P.O./CV 1694/Issue 2	<u>SECURITY</u>	
Date: 21.2.47	<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				See K1001/4			
<u>ENVELOPE:</u> Unmetallised glass							
<u>PROTOTYPE</u> 4104D							
<u>RATING</u>				<u>BASE</u>			
				Bayonet cap 4-pin (BC4)			
				See drawing on page 3			
				and Note B.			
				<u>CONNECTIONS</u>			
				<u>Pin</u>		<u>Electrode</u>	
Filament current (A) 1.0				1		Grid	
Nominal filament voltage (V) 4.5				2		Filament -	
Max. anode voltage (V) 160				3		Filament +	
Max. anode dissipation (W) 5.0				4		Anode	
Mutual conductance (mA/V) 1.15				A			
Amplification factor 2.35				A			
Anode impedance (ohms) 2000				A			
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u>			
				See K1001/A1/D1			
C _{ag} (max) 7.5				<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
C _{ae} (max) 4.0				A (mm)		-	108
C _{ge} (max) 5.0				B (mm)		-	64

NOTE

- A. Measured with $V_a = 130$, and $I_a = 20$ mA.
- B. The axis of the bayonet locating pin shall lie within 25° of the plane of the filament.

TESTS

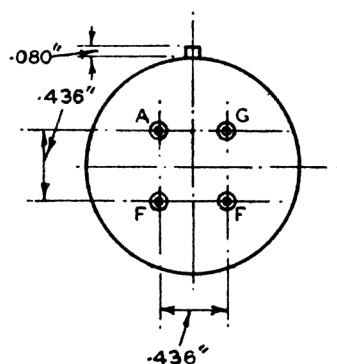
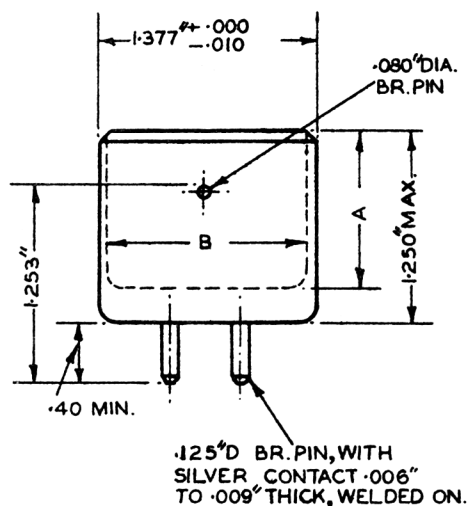
To be performed in addition to those applicable in K1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note
					Min.	Max.		
(a)	See K1001/IIII			<u>CAPACITANCES (pf)</u>				
	Links to H.P.	Links to L.F.	Links to E					
	4	1	2,3,5,6,7,8, 9,10,TC1,TC2		-	7.5	6 per week	
	4	2,3	1,5,6,7,8,9, 10,TC1,TC2.		-	4.0	6 per week	
	1	2,3	4,5,6,7,8,9, 10,TC1,TC2.		-	5.0	6 per week	
(b)	Test Voltage 500 Volts, D.C.			<u>INSULATION (megohms)</u> (i) Anode to filament (ii) Between all other electrodes (iii) Between any electrode and the metallic shell of the base.	100 500 500	- - -	1% 1% 1%	
	If(A)	Va	Vg					
(c)	1.0	-	-	Vf (V)	4.0	5.0	100%	
(d)	1.0	130	-20	Reverse Ig (μ A)	-	0.5	100%	
(e)	1.0	130	-20	Ia (mA)	19.0	31.0	100%	
(f)	1.0	130	-20	μ	2.0	2.7	100%	
(g)	1.0	130	-20	Ra"x" (ohms)	1,600	2,400	100%	
(h)	0.9	130	-20	Ra"y" (ohms)	-	1.2"x"	100%	1

NOTE

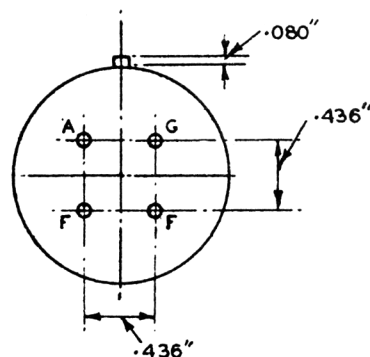
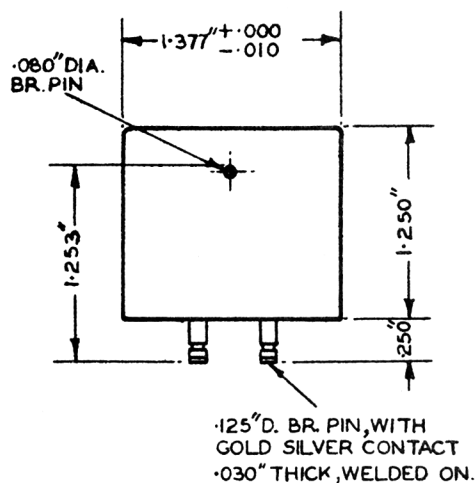
1. Re-adjust If with $V_a = V_g = 0$

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.