VALVE ELECTRONIC CV 1601

(POVT 27)

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

Specification: G.P.O./CV 1601/Issue 1 Dated: 12-12-46 To be read in conjunction with K 1001	SECURITY Specification: Restricted Valve: Restricted

——> indicates a change

TYPE OF VALVE: Vacuum half-wave rectifier, water-cooled
CATHODE: Directly heated tungsten filament
ENVELOPE: Metal-glass
PROTOTYPE CAR1; 4008B

MARKING

See K 1001/4
Additional markings required (See notes A,B,C)
Serial No.....
Filament Volts.....

RATING		AS MARKED	Note
Filament voltage	(V)		B
Nominal filament current	(A)	55.0	
Max. peak inverse voltage	(kV)	37.5	
Max. D.C. output voltage	(kV)	12.5	
Max. rectified output current	(A)	2.0	
Max. anode dissipation	(kW)	10.0	
Min. rate of water flow	(gals/min)	2.0	

BASE

None

CONNEXIONS

See drawing on page 3

DIMENSIONS

See drawing on page 3

PACKING

See K 1001/7.3

NOTES

A. The serial numbers will be allotted by the Inspecting Officer.
B. The Marked Voltage is defined on page 2, test (a).
C. It is not essential that the additional markings shall appear within the frame.

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS		TEST	LIMITS		No. Tested	Note
	Vf (V)	Va (DC)		Min.	Max.		
(a)	Read	-	Vf. Minimum required for peak emission of 6 amps. To be known "Marked Voltage" (V)	18.0	20.0	100%	1
(b)	MV	-	If (A)	50.0	61.0	100%	
(c)	MV	15 kV	D.C. output per valve (A)	2.0	-	100%	2

NOTES

1. (a) The voltage applied to the anode shall be sufficient to draw from the filament a peak emission of 6 amps.

   The test shall be made in accordance with K 1001/A V

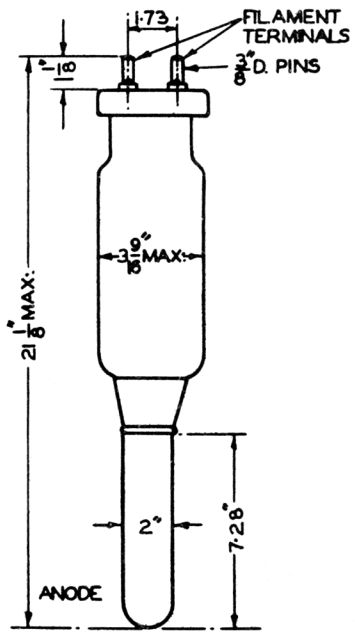
   (b) Alternatively, the voltage applied to the anode shall be sufficient to draw from the filament a peak emission of 1 amp, and the filament voltage required for this emission shall be multiplied by 1.27 to determine the test result.

2. This test shall be conducted in a bi-phase half-wave circuit, and its duration shall be 30 minutes.

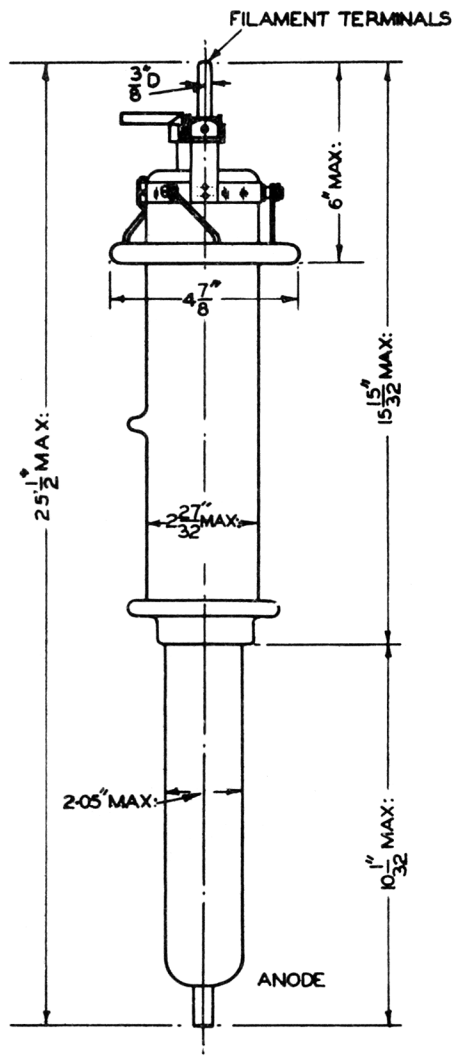
   No sparking or flash-over shall occur.

CV 1601

OUTLINE DRAWING



PROTOTYPE **4008B**



PROTOTYPE **CAR 1**