

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV489 Issue 2. Dated 30.12.50. To be read in conjunction with K1001.	<u>SECURITY</u>	
	<u>Specn.</u> Unclassified	<u>Valve</u> Unclassified

<u>TYPE OF VALVE:-</u> Xenon Thyatron, Triode Connected Tetrode.		<u>MARKING</u> See K1001/4.	
<u>CATHODE:-</u> Directly heated.		<u>BASE</u> See Drawing, page 3. Pin arrangement as for USS4 See K1001/AIV/D1. (See Note C)	
<u>ENVELOPE:-</u> Glass.			
<u>PROTOTYPE:-</u> BT75.			
<u>RATING</u>		Pin	Electrode
Filament Voltage (V)	2.5	1	Cathode (Note A)
Filament Current (A)	11	2	Grid
Peak Hold-off Anode Voltage (V)	1000	3	Anode
Peak Inverse Anode Voltage (V)	1500	4	Screen Grid
Peak Anode Current (A)	15	Screw	
Mean Anode Current (A)	2.5	Terminal 1	Filament
Grid Bias Voltage (V)	-10	Screw	
	-25	Terminal 2	Filament
Operating Temperature (°C)	-40	<u>DIMENSIONS</u> See K1001/AI/D1.	
	to	Dimension	Min.
	+80	A (mm)	-
		B (mm)	-
		over terminals	-
			Max.
			175
			52
			77
		<u>PACKAGING</u> Carton Group "H" See K1005.	

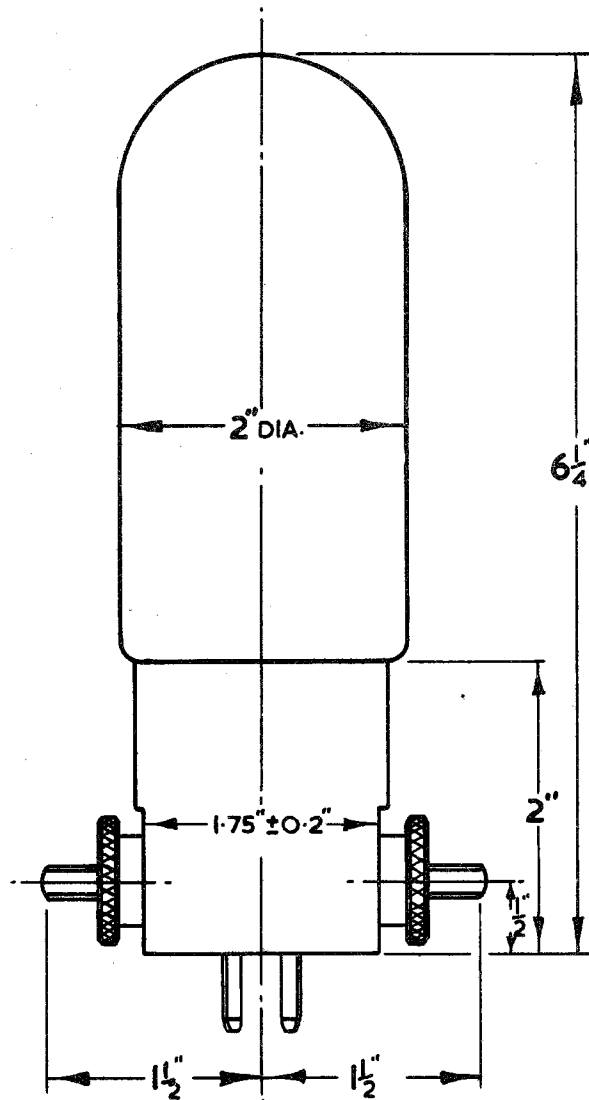
NOTES

- A. The heating time of the filament is 30 seconds approx. The cathode is connected to the centre of the filament.
- B. Applied through a resistance of 2 megohms approximately. For short pulses higher negative grid voltages are permissible.
- C. Using Valveholder Z560020 (RCSC/RCL.251 - VHUX432).

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. Tested	Note
	V <sub>F</sub> (V)	V <sub>a</sub> (V)	V <sub>g</sub> (V)		Min.	Max.		
a	2.5	-	-	If (A)	10	12½	100%	
b	2.5	-	0	V <sub>a</sub> for striking (V)	20	100	100%	
	V <sub>a</sub> increased (through 40 ohms) until discharge occurs.							
c	2.5	500	-	Negative V <sub>g</sub> for hold-off using 2 megohm resistor (V)		10	100%	
d	2.5	Negative 2000	0	Inverse hold-off voltage applied through a resistance of 20 kΩ. There shall be no discharge.			100%	
e	2.35	-	0	V <sub>a</sub> with I <sub>a</sub> = 2.5 A (V)	6	12	100%	



PIN CENTRE POSITIONS

$a = 0.234"$

$b = 0.2185$

