MINISTRY OF SUPPLY - DLRD(A)/TRE

VALVE ELECTRONIC **CV1871**

Specification MOS(A)/CV1871 Issue 2 Dated 8.7.53 To be read in conjunction with K1001.	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Velocity Modulated Oscillator

CATHODE - Indirectly-heated

→ PROTOTYPE - K307

MARKING

See K1001/4

RATING

			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.56	
→ Max. Anode Voltage	(V)	300	A
Max. Total Cathode Current	(mA)	44	B
Min. Tuning Range	(Mc/s)	2750 to 2850	
→ Reflector Voltage Range	(V)	-10 to -130	
Min. Power Output	(mW)	30	
→ Max. Total Impedance in the reflector to cathode circuit	(Megohm)	1.0	

BASE

International Octal

CONNECTIONS

Pin	Electrode
1	No connection
2	Heater-Cathode
3	Heater-Cathode
4	No connection
5	No connection
6	No connection
7	Heater
8	No connection
TC	Reflector
Body	Anode

DIMENSIONS AND CONNECTIONS

See Drawing on Page 3.

NOTES

→ A. The anode of this valve is the resonator.

B. Refers to the beam current when the valve is oscillating.

→ C. The reflector voltage must always remain negative with respect to cathode. If under AFC operating conditions there is a chance of the reflector voltage becoming equal to, or positive with respect to the cathode, a protective diode must be used.

2.4884.P.

To be performed in addition to those applicable in K1001

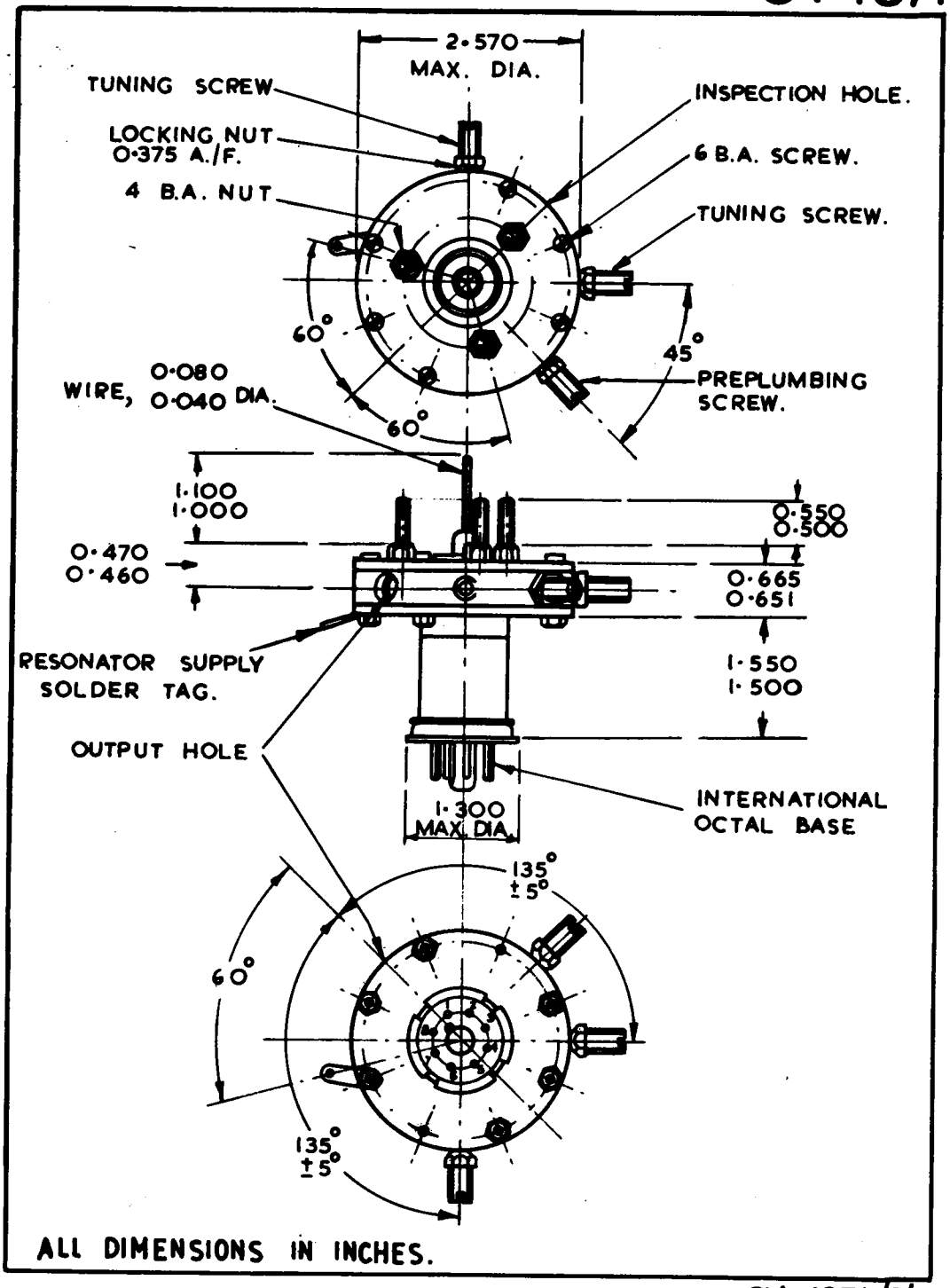
	Test Conditions				Test	Limits		No. Tested	Note
	Vh (V)	Va (V)	V ref. (V)	Frequency (Mcs)		Min.	Max.		
a	6.3	-	-	-	Heater Current (A)	0.52	0.61	S	
b	6.3	300	Adjust for max. output	Any convenient frequency within range 2750-2850	1. Power Output (mW) 2. Cathode Current (mA)	30 20	- 44	S	1
c	6.3	300	Adjust for max. output	2750 +0 -20	1. Power Output (mW) 2. Reflector Voltage (V) 3. Electronic Tuning (Mcs)	30 -10 10	- -130 -	100%	1
d	6.3	300	Adjust for max. output	2850 +20 -0	1. Power Output (mW) 2. Reflector Voltage (V) 3. Electronic Tuning (Mcs)	30 -10 10	- -130 -	100%	1
e	5.7	300	Adjust for max. output	As for Test (b)	1. Power Output (mW) 2. Decrease in Cathode Current (%)	20 -	- 30	100% 100%	1 & 2

NOTES

1. This test shall be performed using the coupling shown in the Drawing on Page 4.

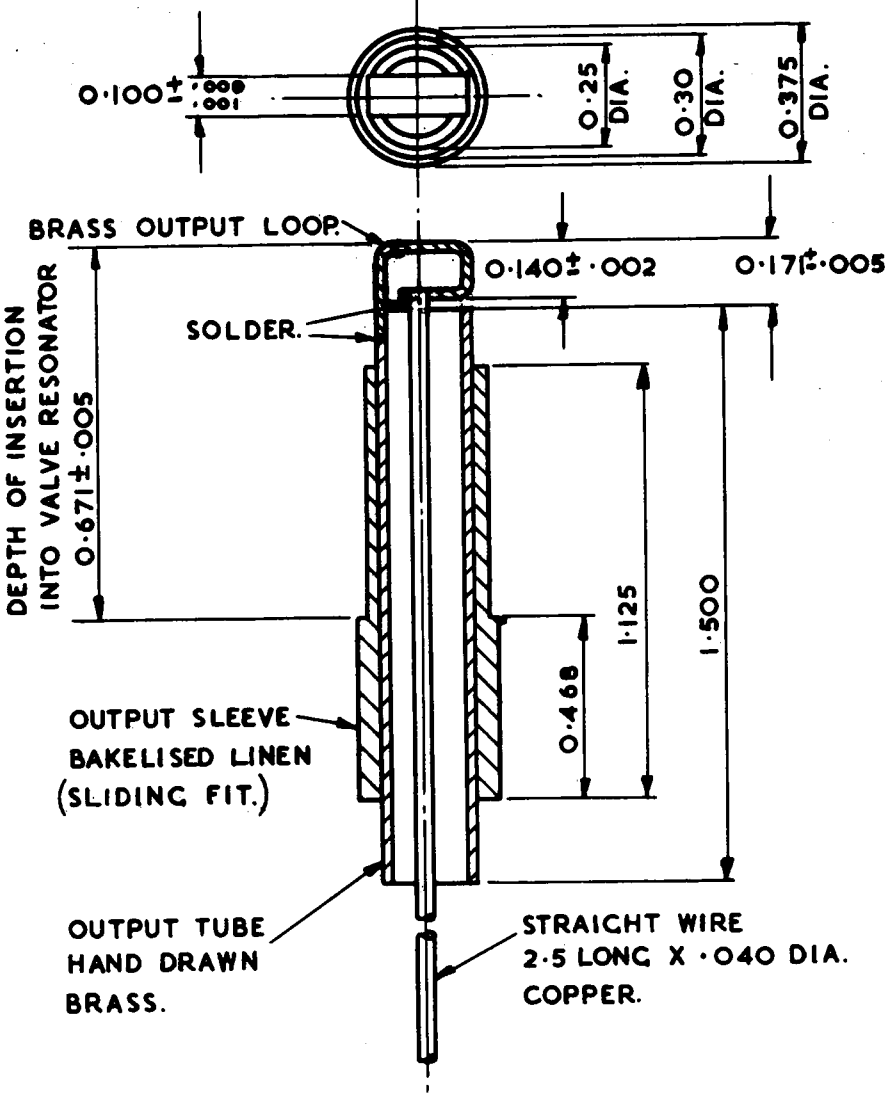
2. This test shall be performed after a minimum storage period of 7 days.

CV 1871



ALL DIMENSIONS IN INCHES.

OUTPUT PROBE ASSEMBLY.



OUTPUT LOOP TUBE AND WIRE ASSEMBLY
TO BE SILVER PLATED.

ALL DIMENSIONS IN INCHES.

CV 1871/2/4