

Specification <u>MAP/CV39/Issue 5</u> Dated 2.12.49. To be read in conjunction with K1001 ignoring clause:- 5.3.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

—————> Indicates a change

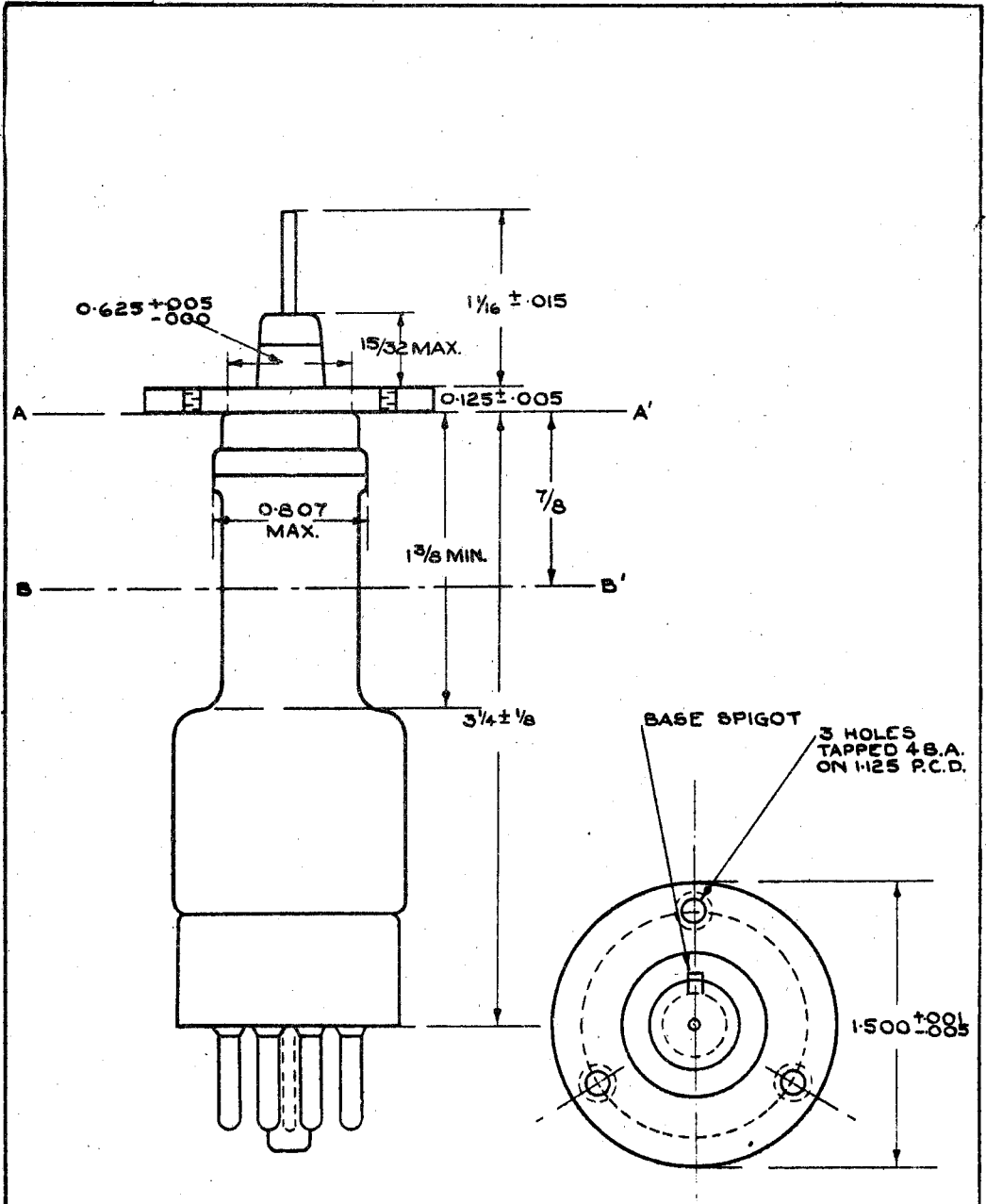
<u>TYPE OF VALVE</u> - Coaxial Oscillator <u>CATHODE</u> - Indirectly Heated <u>ENVELOPE</u> - Glass - Unmetallised <u>PROTOTYPE</u> - S22AF		<u>MARKING</u> See K1001/4	
		<u>DIMENSIONS</u> See drawing on page 3.	
<u>RATING</u>		<u>BASE</u> I.O.	
Heater Voltage (V)	6.3	<u>PACKING</u> See K1005	
Heater Current (A)	0.31		
<u>AVERAGE WORKING CONDI- TIONS</u>		<u>Pin</u>	<u>Electrode</u>
Wavelength of Opera- tion (cms)	12.5	1	No connection
Resonator Voltage (V)	255	2	Heater
Anode Voltage (V)	290	3	Anode
Grid Voltage (V)	0	4	No connection
Minimum Power Output (mW)	450	5	Resonator
Maximum Power Input (W)	15	6	Grid
		7	Heater
		8	Cathode
		Top Connec- tion	Output Line

To be performed in addition to those applicable in K1001.

Clause	Test Conditions					Test	Limits		No. Tested
	Vh	Vg	Va	Vres	Field Strength (gauss)		Min.	Max.	
(a)	6.3	0	0	0	0	Ih (A)	0.275	0.35	100% or S
(b)	6.3	0	var- ied	var- ied	1400 max.	1. Vres (V)	230	280	100%
						2. Va (V)	260	320	100%
Maximum power input 15 watts. Output tuning and matching adjusted to give wavelength of oscillation of 12.5 cms. and maximum power.						3. Power Output (mW)	450	-	100%
						4. There shall be no indication of oscillation at a resonance other than within the range 12.5 ± 0.2 cms.			
(c)	Vh varied over range of 5.5 to 7.0V. All other conditions as in test clause (b)					Power Output at all values of Vh within required range (mW)	450	-	5% (20)

NOTES

- 1: The symbol V_{res} is used to designate the resonator voltage.
- 2: For tests (b) and (c) the magnet used shall have a width of $7/8$ inch, and be set so that one side is against the under side of the flange on the valve. It must therefore occupy the space between axes AA' and BB' on drawing overleaf.



ALL DIMENSIONS IN INCHES