

Specification <u>MAP/CV39/Issue 5</u> Dated 2.12.49. To be read in conjunction with K1001 ignoring clause:- 5.3.	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification</td><td>Valve</td></tr> <tr> <td>RESTRICTED</td><td>UNCLASSIFIED</td></tr> </table>	SECURITY		Specification	Valve	RESTRICTED	UNCLASSIFIED
SECURITY							
Specification	Valve						
RESTRICTED	UNCLASSIFIED						

Indicates a change

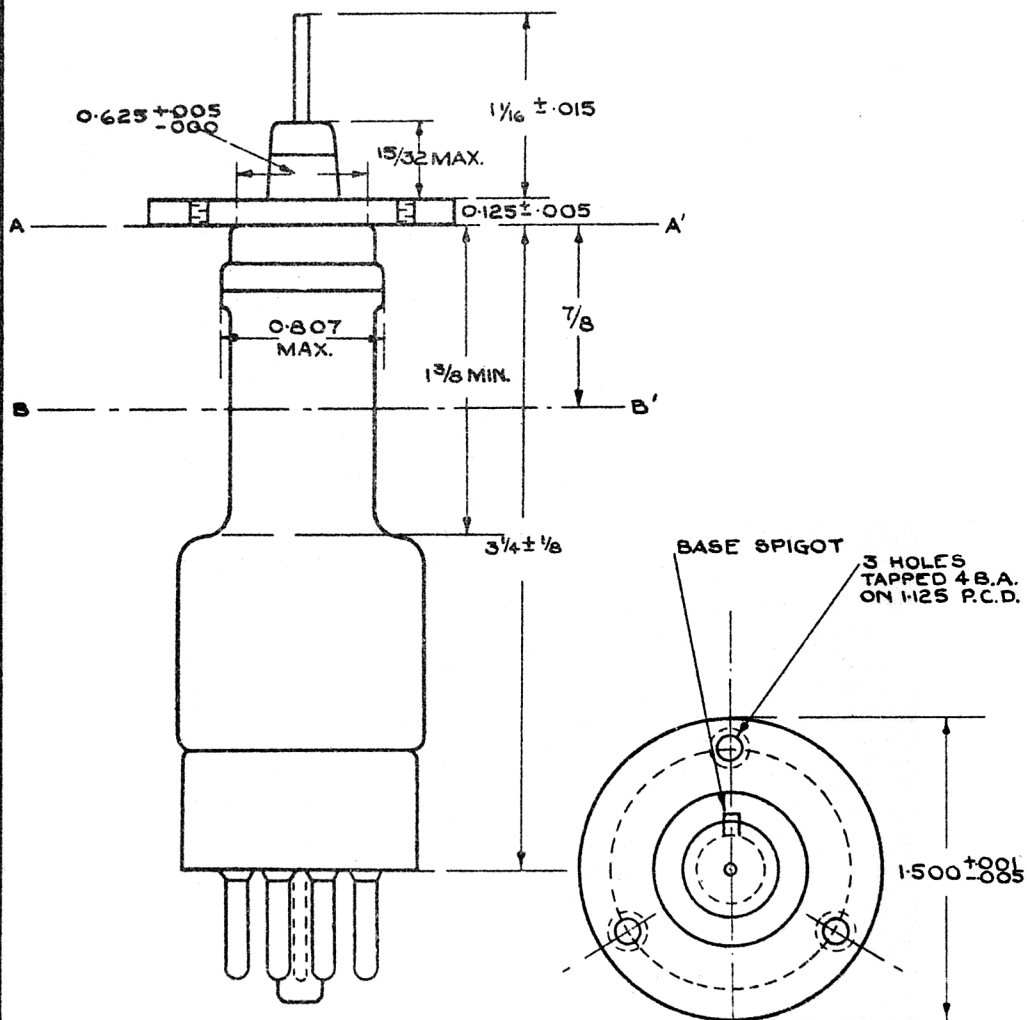
<u>TYPE OF VALVE</u> - Coaxial Oscillator		<u>MARKING</u>	
<u>CATHODE</u> - Indirectly Heated		See K1001/4	
<u>ENVELOPE</u> - Glass - Unmetallised		<u>DIMENSIONS</u>	
<u>PROTOTYPE</u> - S22AF		See drawing on page 3.	
<u>RATING</u>		<u>BASE</u>	
		I.O.	
Heater Voltage (V) 6.3		<u>PACKING</u>	
Heater Current (A) 0.31		See K1005	
<u>AVERAGE WORKING CONDITIONS</u>		<u>Pin</u>	
Wavelength of Operation (cm) 12.5		Electrode	
Resonator Voltage (V) 255		1 No connection	
Anode Voltage (V) 290		2 Heater	
Grid Voltage (V) 0		3 Anode	
Minimum Power Output (mW) 450		4 No connection	
Maximum Power Input (W) 15		5 Resonator	
		6 Grid	
		7 Heater	
		8 Cathode	
		Top Connection	
		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%
	Maximum power input 15 watts. Output tuning and matching adjusted to give wavelength of oscillation of 12.5 cms. and maximum power.					2. Va (V)	260	320	100%
						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