

Specification: G.P.O./CV 5048/Issue 1	SECURITY Specification Valve Unclassified Unclassified	
Dated: 22.1.65		
To be read in conjunction with K 1001 BS 448 and BS 1409		

→ Indicates a change

<u>TYPE OF VALVE:</u> Coaxial Line Velocity Modulated Oscillator				<u>MARKING</u>	
<u>CATHODE:</u> Indirectly Heated				See K 1001/4	
<u>ENVELOPE:</u> Glass					
<u>PROTOTYPE:</u> V239C/1K					
<u>Ratings and Characteristics</u> Not for Inspection Purposes <u>All Limiting Values are Absolute</u>				<u>Base</u> B 7 G	
				<u>Connections</u>	
				<u>Pin</u>	<u>Electrode</u>
Heater Voltage	(V)	6.3	Note A B C	1	g ¹
Heater Current (Nom.)	(A)	0.26		2	K
Max Anode Voltage	(V)	400		3	h
Max Cathode Current	(mA)	65		4	h
Max Resonator Voltage	(V)	400		5	a
Max Screen Voltage	(V)	400		6	Res
Max Screen Current	(mA)	3.75		7	g ²
Min Frequency Range of Oscillation	(Mc/s)	3780 to 4040			
Min Power Output over the Frequency Range of Oscillation	(mW)	350			
Notes: A Anode voltage should exceed resonator voltage by at least 15 volts.					
B Normally adjusted for max. r.f. output.					
C Screen voltage max. never to exceed resonator voltage.					
				<u>Dimensions</u> See Drawing Page 3	

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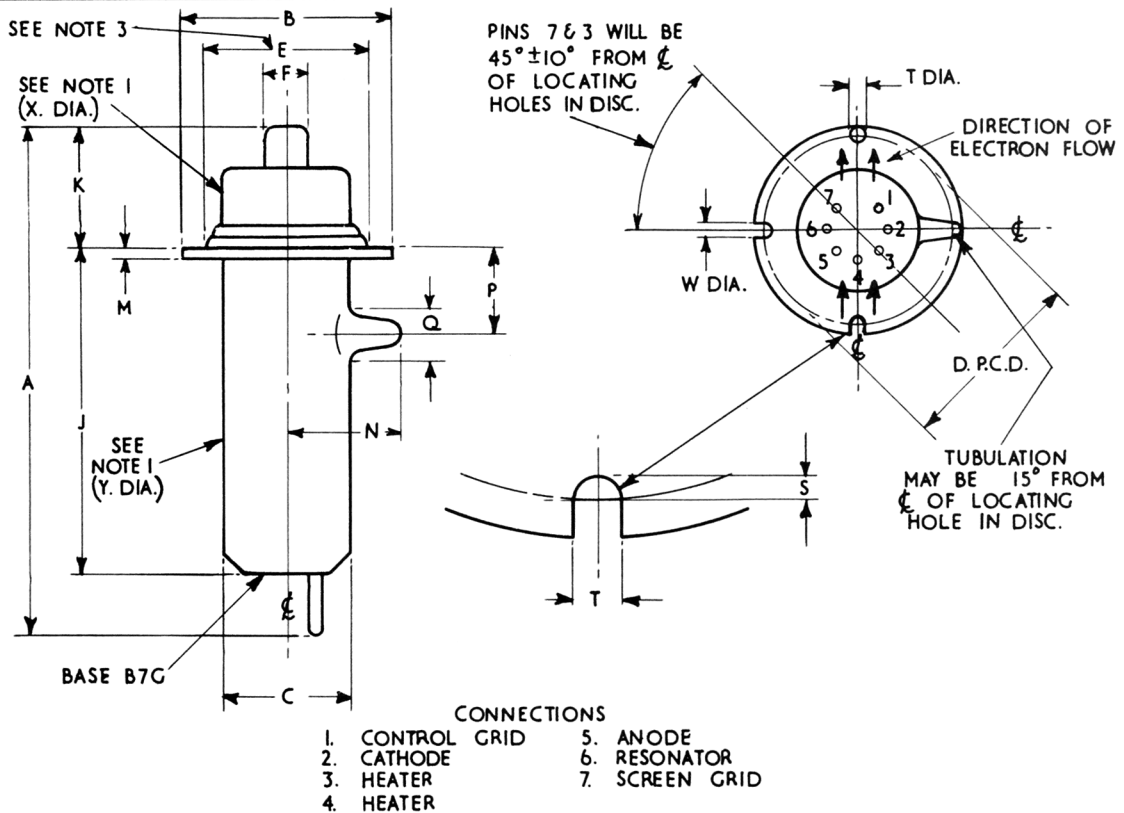
TESTS

To be performed in addition to those applicable in K1001

TEST CLAUSE	TEST CONDITIONS							TEST & UNITS	LIMITS		NOTES
	V _h Volts	V _{g1} Volts	V _a Volts	V _{RES} Volts	V _s Volts	I _a mA	I _k mA		MIN	MAX	
a	6.3	-	-	-	-	-	-	Heater Current Amps	0.235	0.265	1,2
b	6.3	-4.0	300	280	Adj. V _s	-	50	I _{RES} (mA) V _s (V) I _s (mA) I _g (μA)	-	16 160 1.5 30	1,2,3
c	5.0	-4.0	300	280	Set at V _s	-	-	I _k (mA)	4.4	-	1,2,3
d	6.3	-4.0	300	Adj for max R.F. Power	Adj	35	-	Oscillation Test 1 Freq. Limits (Gc/s) V _{RES} (V) Power Output (mW) Circuit Length (cms)	3.775 235 350 4.0	3.780 285 - 6.0	1,2,3
e	6.3	-4.0	300	Adj for max R.F. Power	Adj	35	-	Oscillation Test 2 Freq. Limits (Gc/s) V _{RES} (V) Power Output (mW) Circuit Length (cms)	4.040 235 350 1.0	4.045 285 - 2.2	1,2,3

NOTES

- The tests are to be performed with the valve in a circuit approved by the Qualification Approval Authority.
- The heater shall be pre-heated for a period of not less than one minute before this test is carried out.
- The inspection levels are to be agreed with the Inspection Authorities.



- NOTES
1. THIS PORTION OF BULB WILL NOT FOUL A CYLINDER OF INT. DIA. SPECIFIED WHICH IS CONCENTRIC WITH THE PITCH CIRCLE OF THE LOCATING HOLES IN DISC.
 2. BASIC FIGURES ARE INCHES.
 3. ALSO MIN. CLAMPING DIA.

DIM	MILLIMETRES	INCHES	DIM	MILLIMETRES	INCHES
A	80 MAX.	3.15 MAX.	P	13.5 ± 4.0	0.55 ± 0.16
B	31.75 MAX.	$1\frac{1}{4}$ MAX.	Q	8.5 MAX.	0.33 MAX.
C	20.1 MAX.	0.79 MAX.	S	$+0.13$	$+0.005$
D	30.96 ± 0.06	1.218 ± 0.002		-0.00	0.062 -0.000
E	24 MAX.	0.94 MAX.	T	$+0.06$	$+0.002$
F	8.12 MAX.	0.320 MAX.		-0.00	0.093 -0.000
J	56 MAX.	2.2 MAX.	W	$+0.13$	$+0.005$
K	16.5 MAX.	0.65 MAX.		-0.00	0.110 -0.000
M	0.3 MAX.	0.012 MAX.	X	21.59 MIN.	0.850 MIN.
N	18 MAX.	0.710 MAX.	Y	20.32 MIN.	0.800 MIN.