

Specification: G.P.O./CV 5049/Issue 1 Dated: 22.1.65 To be read in conjunction with K 1001 BS 448 and BS 1409	SECURITY Specification Unclassified Valve Unclassified
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→ Indicates a change

<u>TYPE OF VALVE:</u> Coaxial Line Velocity Modulated Oscillator			<u>MARKING</u> See K 1001/4	
<u>CATHODE:</u> Indirectly Heated				
<u>ENVELOPE:</u> Glass				
<u>PROTOTYPE</u> V241C/1K				
<u>Ratings and Characteristics</u> <u>Not to be used for inspection purposes</u> <u>All limiting values are absolute</u>			<u>Base</u> B 7 G	
			Note	
Heater Voltage	(V)	6.3		
Heater Current (Nom.)	(A)	0.26		
Max Anode Voltage	(V)	400	A	
Max Cathode Current	(mA)	65		
Max Resonator Voltage	(V)	400	B	
Max Screen Voltage	(V)	400	C	
Max Screen Current	(mA)	3.75		
Min Frequency Range of Oscillation	(Mc/s)	4,000 to 4,255		
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 maximum r.f. output.				
C Screen voltage max. never to exceed resonator voltage.				
			<u>Connections</u>	
			Pin	Electrode
			1	g ¹
			2	k
			3	h
			4	h
			5	a
			6	Res
			7	g ²
			<u>Dimensions</u> See Drawing Page 3	

CV 5049

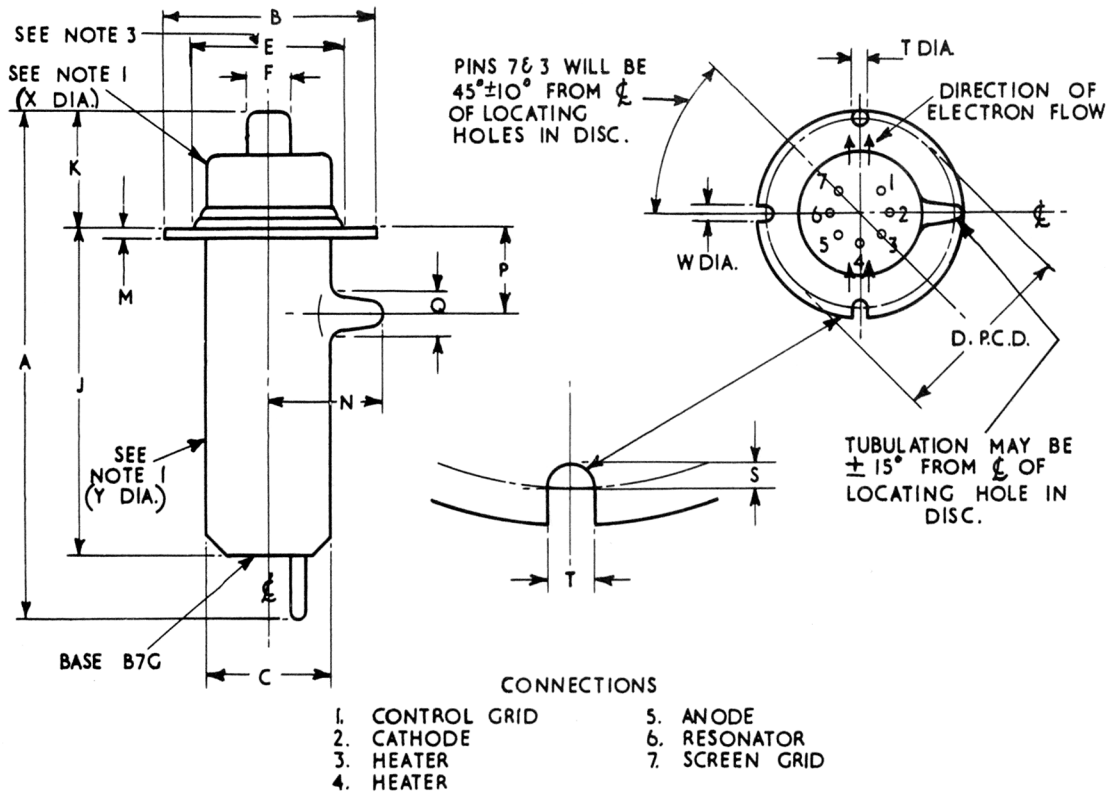
TESTS

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	-40	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	-40	300	280	Set at V _s	-	-	I _k (mA)	4.4	-	1, 2, 3
d	6.3	-40	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)	3.995 235 350 3.5	4.000 285 - 5.5	1, 2, 3
e	6.3	-40	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)	4.255 235 500 1.0	4.260 295 - 2.2	1, 2, 3

NOTES

1. The tests are to be performed with the valve in a circuit approved by the Qualification Approval Authority.
2. The heater shall be pre-heated for a period of not less than one minute before this test is carried out.
3. 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	0.53 ± 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		1.6	0.062
E	24 MAX.	0.94 MAX.	T	$+0.06$	$+0.002$
F	8.12 MAX.	0.320 MAX.		-0.00	0.093
J	56 MAX.	2.2 MAX.	W	$+0.13$	$+0.005$
K	16.5 MAX.	0.65 MAX.		-0.00	0.110
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.