

TYPE OF VALVE - Low Noise R.F. Grounded Cathode Triode Amplifier				MARKING		
CATHODE - Indirectly heated.				K.1001/4.		
ENVELOPE - Glass				BASE		
PROTOTYPE - A2599 (RETMA. 6CT4.)				BS.448/B9A		
RATINGS (All limiting values are absolute)				CONNECT IONS		
NOTES				Pin	Electrode	
				1	Grid	g
Heater Voltage (V) 6.3				2	Cathode	k
				3	Cathode	k
Heater Current (A) 0.3				4	Heater	h
				5	Heater	h
Max. Anode Voltage (V) 250				6	Cathode	k
				7	Cathode	k
Max. Anode Dissipation (W) 2.5				8	Grid	g
				9	Anode	a
Max. Cathode Current (mA) 20.0				DIMENSIONS		
				See BS.448/B9A/2.1 Size Ref. No. 2		
Max. Heater Cathode Voltage (V) 100				See BS.448/B9A/2.1 Size Ref. No. 2		
				See BS.448/B9A/2.1 Size Ref. No. 2		
Mutual Conductance (mA/V) 14 A, C.				See BS.448/B9A/2.1 Size Ref. No. 2		
CAPACITANCES (pF)				DIMENSIONS (mm)		
C _{ge} (Nom.) 3.50				MIN.		
C _{ae} (Nom.) 0.70				MAX.		
C _{ag} (Nom.) 1.1				MIN.		
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TESTS

To be performed in addition to those applicable in K.1001 excluding Clause 5.2

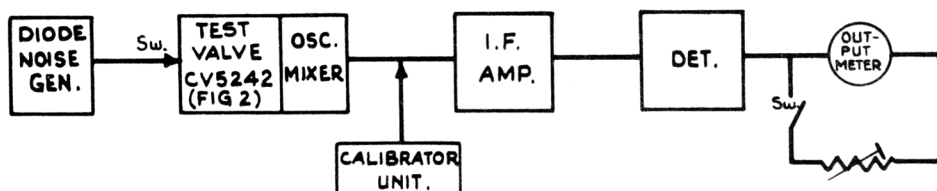
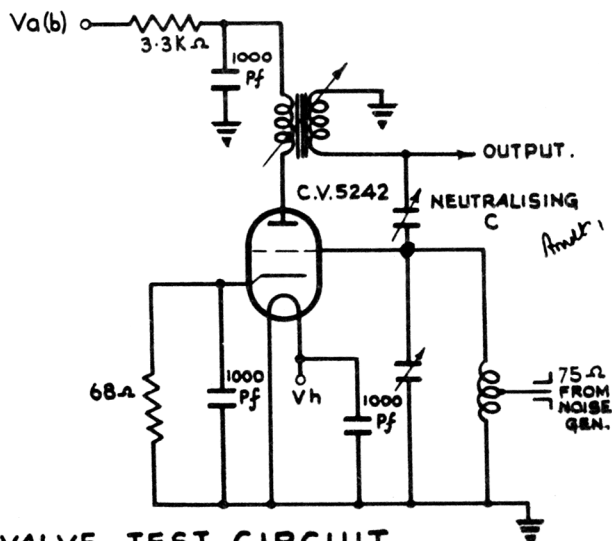
TEST CONDITIONS:- unless otherwise stated									
		V _h (V)	V _{a(b)} (V)	R _L (K Ω)	R _k (Ω)				
		6.3	180	3.3	68				
K.1001 Ref.	Test	Test Conditions		AQL %	Insp. Level	Sym- bol	Limits		
							Min.	Bogey	Max.
	<u>Group A</u>								
	Anode Current				100%	I _a	11.5	15.5	19.5 mA
	Anode Current	V _{g1} = -4.0V			100%	I _a	-	-	2.6 mA
	Mutual Conductance	Note 1			100%	g _m	10.5	14.0	17.5 mA/V
	Reverse Grid Current	V _g = -1.0V R _g = 500 k Ω max.			100%	-I _g	-	-	1.2 μ A
	<u>Group B</u>								
	Heater Current			0.65	II	I _h	0.27	0.30	0.33 A
	Heater Cathode Leakage Current	V _{hk} $\pm$ 90V		0.65	II	I _{hk}	-	-	20 μ A
	<u>Group C</u>								
	Noise Factor	Freq. = 49 Mc/s. Note 3		6.5	I	NF	-	-	1.7 dB
7.2 AIII	<u>Group D</u>								
	Base Strain	No voltages		6.5	IC	-	-	-	-
	Capacitances	Measured on a 1 Mc/s bridge with valve mounted in a fully shielded socket. Valve screened. See Note 2.				C _{in}	2.8	3.5	4.2 pF
						C _{ag}	0.9	1.1	1.3 pF
						C _{out}	0.50	0.70	0.90 pF
AIX/ 2.5	<u>Group E</u>								
	Electrical retest after 28 days holding period				100%				
	Inoperatives			0.5		-	-	-	-
	Reverse Grid Current	R _g 500k Ω max.		0.5		I _g	-	-	1.5 μ A

NOTES

1. Measured in a mutual conductance bridge, frequency 1 Kc/s; maximum input signal to grid 100m.V.rms. or any other approved method.
2. Capacitance connections as follows:-

CAPACITANCE	H.P.	L.P.	R
C IN	1,8	2,3,4,5,6, 7,C.	9
C OUT	9	2,3,4,5,6, 7,C	1,8
C ag	9	1,8	2,3,4,5,6, 7,C

3. To be measured in an approved circuit: See Figs. 1 & 2 below.

FIG.1.NOISE FACTOR SCHEMATIC DIAGRAM.FIG.2.HEAD AMPLIFIER VALVE TEST CIRCUIT.

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION CV5242 ISSUE NO.1 DATED 1.2.62

AMENDMENT NO.1

Page 3 Fig.2

The connection between the two variable capacitors (the upper one is designated "Neutralising C") is **incorrectly** shown looped over the lead from the grid. The loop should be replaced by a "dot" to indicate a connection.

(40183)

Director,
R.A.E.
18.5.62.

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