

MINISTRY OF SUPPLY, D.L.R.D./R.A.E.

SPECIFICATION	U.S. / CV. 2387	SECURITY
Issue No. 1	Dated 1.4.59.	
To be read in conjunction with K.1001, BS.448 and BS.1409.	SPECIFICATION	VALVE
	Unclassified	Unclassified

TYPE OF VALVE: Low Grid Current Electrometer Pentode.				<u>MARKING</u> See K.1001/4.	
CATHODE: Indirectly heated.					
ENVELOPE: Glass.				<u>BASE</u> BS.44B/B8D/F/1.1 Note B	
PROTOTYPE: VX 8124,					
<u>RATINGS</u> All limiting values are absolute.				<u>CONNECTIONS</u>	
				<u>NOTES</u>	

To be performed in addition to those applicable in K.1001.

TEST CONDITIONS:

Unless otherwise stated.

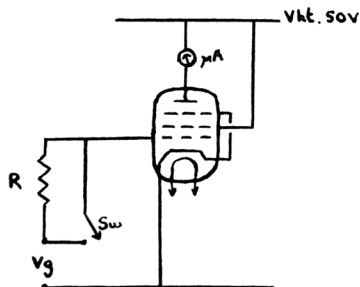
$V_a$ (V)	$V_{g2}$ (V)	$V_{g3}$ (V)	$V_h$ (V)
50	50	0	50 5.0

Test	Test Conditions	AQL %	Insp. Level	Symbol	Limits		Units
					Min.	Max.	
<u>GROUP A</u>							
Heater Current		-	100%	I <sub>h</sub>	170	200	mA
Negative Grid Voltage	Adjust V <sub>g1</sub> for I <sub>a</sub> = 75μA.	-	100%	-V <sub>g1</sub>	1.9	3.5	V
Reverse Grid Current	Adjust V <sub>g1</sub> for I <sub>a</sub> = 75μA. Note 1.	-	100%	-I <sub>g1</sub>	-	50	μA
Mutual Conductance	Adjust V <sub>g1</sub> for I <sub>a</sub> = 75μA.	-	100%	g <sub>m</sub>	130	270	μA/V
Screen Current	Adjust V <sub>g1</sub> for I <sub>a</sub> = 75μA.	-	100%	I <sub>g2</sub>	15	35	μA
<u>GROUP B</u>							
Capacitance	To be measured on a 1Mc/s R.F. bridge with valve mounted in a fully shielded socket. Valve screened. Note 2.	6.5	IC	C <sub>in</sub> C <sub>out</sub> C <sub>g1</sub>	3.0 3.5 -	4.6 5.3 0.3	pF pF pF

NOTES

- To be measured in an approved equipment. The conditions of Note 'D' on page 1 should be applied. A typical test circuit is shown below.
- The connections for these tests shall be:-

TEST	HP	LP	E
$C_{in}$	1	2,3,5,6,7,9.	4,8.
$C_{out}$	4,8.	2,3,5,6,7,9.	1
$C_{g1}$	1	4,8.	2,3,5,6,7,9.

Operating Details

$R$  is a known resistance (of the order of  $10^{10}\Omega$ )  
 With 'Sw' closed, adj.  $V_g$  for  $I_a = 75\mu A$ , note  $V_g$ .  
 Open 'Sw' readjust  $V_g$  for  $I_a = 75\mu A$ .  
 Then  $\frac{\Delta V_g}{R} = -I_{g1}$ .

LOW GRID CURRENT MEASURING CIRCUIT

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION CV 2387

ISSUE 1. DATED 1.4.59

AMENDMENT NO.1

Page 2. Test Conditions.

Under this heading amend right-hand entry to Vh  
(v)  
5.0

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