

Specification M.O.A./CV.5961 Issue 1A. Dated 31.3.65 To be read in conjunction with K1001, BS.448 and BS.1409	<table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <th><u>Specification</u></th><th><u>Valve</u></th></tr> <tr> <td>Unclassified</td><td>Unclassified</td></tr> </table>	<u>SECURITY</u>		<u>Specification</u>	<u>Valve</u>	Unclassified	Unclassified
<u>SECURITY</u>							
<u>Specification</u>	<u>Valve</u>						
Unclassified	Unclassified						

<u>TYPE OF VALVE:</u> Sub-miniature R.F. Pentode <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Glass, Metallised <u>PROTOTYPE:</u> CV.2371 Selected	<u>MARKING</u> See K1001/4, except that the valve shall be marked with the CV No., Factory and date code only.
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<u>RATING</u>				<u>BASE</u>	
(All limiting ratings are absolute)				BS448/B5A with flexible leads	
				Note	
Filament Voltage	(V)	1.25			
Filament Current	(mA)	25			
Max. Anode Voltage	(V)	100			
Max. Screen Voltage	(V)	100			
Anode Current	(mA)	1.7	A	<u>Pin</u>	<u>Electrode</u>
Screen Current	(mA)	0.45	A		
Mutual Conductance	(mA/V)	0.95	A	1	a
Anode Impedance	(M Ω)	1.6	A	2	g2
				3	f(-), M
				4	g1
				5	f(+), g3
					See Note C

<u>CAPACITANCE (pF)</u>		<u>DIMENSIONS</u>
c _a , g1 (Max.)	0.01	See Drawing 3
c _{out} (Nom.)	3.6	
c _{in} (Nom.)	3.1	

<u>NOTES</u> A. Measured at $V_a = V_{g2} = 67.5$ $V_{g1} = 0$ B. Sharp bends in valve leads must not be made closer than 1.5 mm. to the glass seal and soldered joints in the leads must not be made closer than 5.0 mm. to the seal. C. Lead 1 shall be indicated by a red dot. D. The Joint Service Catalogue Number is 5960-99-037-3166

TESTS

CV 5961

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To be performed in addition to those applicable in K1001

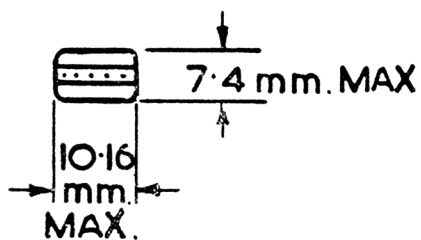
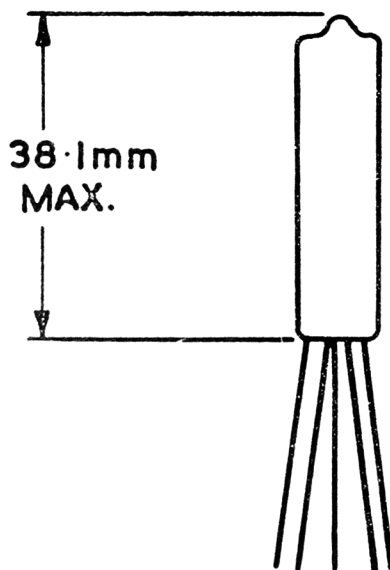
TEST CONDITIONS:- Unless otherwise stated:-

$V_f = 1.25 \text{ V}$, $V_a = 67.5 \text{ V}$, $V_{g2} = 67.5 \text{ V}$, $V_{g1} = 0$

TEST	TEST CONDITIONS	INSP. LEVEL	A.Q.L. (%)	Symbol	LIMITS		UNITS	
					Min.	Max.		
<u>GROUP A</u>								
Reverse Grid Current	$-V_{g1} = 1.5V$	100%	-	$-I_{g1}$	-	0.5	μA	
<u>GROUP B</u>								
	<u>Combined A.Q.L.</u>		Note 3					
Filament Current	$-V_{g1} = 6.0 V.$ Note 1	II	0.65	I_f	22	28	mA	
Anode Current (1)		II	0.65	$I_a(1)$	1.25	2.25	mA	
Screen Current		II	0.65	I_{g2}	0.3	0.6	mA	
Anode Current (2)		II	0.65	$I_a(2)$	-	20	μA	
Mutual Conductance (1)		II	0.65	$g_m(1)$	0.70	1.2	mA/V	
Mutual Conductance (2)		$V_f = 1.0 V$	II	0.65	$g_m(2)$	0.60	-	mA/V
Microphony		$R_L = 10K.0hms$ Note 2	II	1.0	V_a A.C.	-	50	mVpk to pk
<u>GROUP C</u>								
Capacitances	To be measured on a 1 Mc/s R.F. Bridge in a fully shielded socket. Valve screened.	IC	6.5	C_{in}	2.7	3.5	pF	
				C_{out}	3.4	4.2	pF	
				C_{ag1}	-	0.01	pF	

NOTES

- A 1 Megohm protective resistance in series.
- Readings are to be taken on microphony testing equipment as described in K1001 Appendices X and XII. A low pass filter may be included in the circuit providing it does not cut off at a frequency less than 3 kc/s., the measurement to be made after a maximum delay of 2.0 secs.
 V_a may be taken to equal V_{ab} . For Circuit Diagram see Page 4 fig.2.
- A combined AQL of 1% shall be applied to the first four tests.

FIG 1

LEADS LENGTH 38 mm. MIN.

FIG. 2 MICROPHONY TEST CIRCUIT

