

MINISTRY OF SUPPLY (S.R.D.E.)

Specification MOS/CV1944/Issue 8 Dated 9.3.46 To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Restricted

—————→ indicates a change

<u>TYPE OF VALVE:-</u> Triode-hexode			<u>MARKING</u>			
<u>CATHODE:-</u> Indirectly heated			See K.1001/4			
<u>ENVELOPE:-</u> Glass,unmetallised			Additional marking:-			
<u>PROTOTYPE:-</u> 6K8G			6K8G			
<u>RATING</u>		Note	<u>BASE</u>			
			IO			
Heater volts	6.3		Pin	Electrode		
Heater current (A)	0.3		1	No connection		
<u>Hexode Section</u>			2	Heater		
Max. anode volts	300		3	Hexode anode		
Max. screen volts	150		4	Screen grid (G2.G4)		
Optimum heterodyne volts (RMS)	7.5		5	Oscillator grid		
Conversion conductance (uA/V)	350		6	Oscillator anode		
Anode impedance (MR)	0.6		7	Heater		
<u>Triode Section</u>			8	Cathode		
Max. anode volts	125		T.C	Hexode control grid		
Mutual conductance (mA/V)	3.0					
<u>CAPACITANCES (pF)</u> (Max. values)				<u>TOP CAP</u>		
<u>Hexode Section</u>				See K.1001/AI/D5.2		
Cag	0.08			<u>DIMENSIONS</u>		
Cae	5.6			See K.1001/AI/D1		
Cge	5.3					
<u>Triode Section</u>				Dimension	Min.	Max.
Cae	4.7			A mm	107	117
Cge	7.7			B mm	-	40

TESTS

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

	Test Conditions						Test	Limits		No. tested
								Min.	Max.	
a	See K.1001/AIII						Capacitances (pF) <u>Hexode Section</u>			
	Links to H.P.	Links to L.P.	Links to E				i Cag	-	0.08	T.A.
	3	T.C.1	1,2,4,5,6, 7,8,9,10, TC2.				ii Cae	-	5.6	
	3	1,2,4,5, 6,7,8.	TC1,9,10, TC2.				iii Cge	-	5.3	6
	TC1	1,2,4,5, 6,7,8.	3,9,10, TC2.				<u>Triode Section</u> i Cae	-	4.7	per
	6	1,2,3,4, 7,8,TC1	3,9,10, TC2				ii Cge	-	7.7	week
b	Hexode Section			Triode Sect.						
	Vh	Va	Vg3	Vg2	Vac	Vge	Ih (A)	0.27	0.33	100% or S
	6.3	-	-	-	-	-				
Tests c, d, e, f and g are to be performed with the triode in an oscillating condition at a frequency of 7 Mc/s. Grid current, thru grid leak of 50,000 Ω , to be adjusted to 150 μ A.										
c	6.3	250	-3	100	100	0	Hex. Ia (mA)	1.8	3.2	100%
d	6.3	250	-3	100	100	0	Hex. Ig2 (mA)	3.4	8.2	100%
e	6.3	250	-3	100	100	0	Rev. Ig3 (μ A)	-	3.0	100%
f	6.3	250	-3	100	100	0	gm Note 1 (mA/V)	0.3	-	100%
g	6.3	250	-3	100	100	0	Osc. Ia (mA)	2.4	4.6	100%
h	6.3	250	-3	100	-	-	gc Note 2 (μ A/V)	250	-	1%(20)

NOTES

1. If 100% conversion conductance tests are performed, test f may be omitted.
2. Test h to be performed at a frequency of 50 c/s with grid current adjusted to 150 μ A.