

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

Specification MOS/CV1344/Issue 3 Dated 26.6.46. To be read in conjunction with K1001.	<u>SECURITY</u> <u>Specification</u> Restricted	<u>Valve</u> Restricted
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→ indicates a change

<u>TYPE OF VALVE:-</u> Triode pentode			<u>MARKING</u>		
<u>CATHODE:-</u> Directly heated			See K1001/4		
<u>ENVELOPE:-</u> Glass, metallised					
<u>PROTOTYPE:-</u> TP22					
<u>RATING</u>			<u>BASE</u>		
			B9		
			<u>Note</u>		
Filament voltage	(V)	2.0	Pin	Electrode	
Filament current	(A)	0.26		1 Screen grid	
<u>PENTODE SECTION</u>			2	Pentode anode	
Max. anode voltage	(V)	150	3	Suppressor grid	
Max. screen voltage	(V)	150	4	Filament	
Mutual conductance	(mA/V)	1.3	5	Filament	
<u>TRIODE SECTION</u>			6	No connection	
Max. anode voltage	(V)	150	7	Triode anode	
Mutual conductance	(mA/V)	1.3	8	Triode control grid	
Amplification factor		33	9	Metallising	
			T.C.	Pentode control grid	
<u>CAPACITANCES (pF)</u>			<u>TOPCAP</u>		
<u>PENTODE SECTION</u>			See K1001/AI/D5.1		
C _{ag1} (max)		0.032	<u>DIMENSION</u>		
C _{ae}		12.0	See K1001/AI/D1		
O _{ge}		9.25	<u>Dimension</u>		
O _{gs}		9.6	<u>Min.</u>		
Pentode anode to triode anode		2.35	<u>Max.</u>		
<u>TRIODE SECTION</u>					
C _{ag1}		4.6	A	mm	118.5
C _{ae}		9.1	B	mm	43
C _{g1e}		4.5	L	mm	103.5
					125.5
					47
					109.5

NOTESA. Measured at $V_a = 120$, $V_{g2} = 60$, $V_{g1} = 0$.B. Measured at $V_a = 100$, $V_g = 0$.

This valve type is obsolete and this specification is for record purposes only.

To be performed in addition to those applicable in K1001

	Test conditions			Test	Limits		No. tested			
					Min.	Max.				
a	See K1001/AIII			Capacitances (pF)	-	0.032	6 per week			
	Links to H.P.	Links to L.P.	Links to E	PENTODE SECTION						
	2	TC ₁	1,3,4,5, 6,7,8,9, 10, TC ₂	(i) Cag ₁						
	2	1,3,4,5, 6,7,8,9,	10, TC ₁ , TC ₂	(ii) Cae				9.0	15.0	
	TC ₁	1,3,4,5, 6,7,8,9	2,10, TC ₂	(iii) Cg _{1e}				7.0	11.5	
	3	1,4,5,6, 7,8,9, TC ₁	2,10, TC ₂	(iv) Cg _{3e}				8.3	10.9	
	2	7	1,3,4,5, 6,8,9,10, TC ₁ , TC ₂	(v) Pentode anode to triode anode.				1.7	3.0	
	7	8	1,2,3,4, 5,6,7,9, 10, TC ₁ , TC ₂	TRIODE SECTION (vi) Cag ₁				3.5	6.0	
	7	1,2,3,4, 5,6,9, TC ₁	8,10, TC ₂	(vii) Cae				6.8	11.4	
	8	1,2,3,4, 5,6,9, TC ₁	7,10, TC ₂	(viii) Cg _{1e}	3.6	5.6				
b	V _f = 2.0 volts			If (A)	0.23	0.29	100%			
	Pentode Section									
	V _f	V _a	V _{g3}	V _{g2}	V _{g1}	I _a (uA)				
c	2.0	120	0	60	0	-	I _a (mA)	2.0	4.0	100%
d	2.0	120	0	60	0	-	I _{g2} (mA)	0.75	1.5	10% (50)
e	2.0	120	0	60	0 to -1	-	g _m (mA/V)	1.1	1.6	100%
f	2.0	120	0	60	-1	-	Rev I _g (uA)	-	1.0	100%
g	2.0	120	0	120	Read	30	V _{g1} (V)	-9	-16	1% (20)
h	2.0	120	0	120	As in clause g	30	g _m (uA/V)	14	44	1% (20)
	Triode section									
	V _f	V _a	V _g							
j	2.0	100	0				I _a (mA)	1.6	3.5	100%
k	2.0	100	0 to -1				g _m (mA/V)	1.1	1.6	100%