

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

Specification MOS/CV783/Issue 2	<u>SECURITY</u>	
Dated:- 13.11.46	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K1001	Restricted	Unclassified

—————> indicates a change

<u>TYPE OF VALVE:-</u> Power amplifier pentode				<u>MARKING</u>		
<u>CATHODE:-</u> Directly heated				See K1001/4		
<u>ENVELOPE:-</u> Glass-unmetallised				Additional marking :-		
<u>PROTOTYPE:-</u> 1S4				1S4		
<u>RATING</u>			<u>Note</u>	<u>BASE</u>		
				B7G		
Filament voltage (V)	1.4	A	<u>Pin</u>	<u>Electrode</u>		
Filament current (mA)	100		1	F-ve, G3		
Max. anode voltage	100		2	Anode		
Max. screen voltage	75		3	Control grid		
Mutual conductance (mA/V)	1.5		4	Screen grid		
Anode impedance (approx.) (M Ω)	0.1		5	F-ve, G3		
Anode current (mA)	7.4		6	Anode		
Screen current (mA)	1.4	A	7	F+ve		
Max. cathode current (mA)	11.0		<u>DIMENSIONS</u>			
<u>NOTES</u>			See K1001/AI/D4			
A. Measured at $V_a = 90$, $V_{g2} = 67.5$, $V_{g1} = -7$.			<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
			A mm		-	54
			B mm		-	19

TESTS

To be performed in addition to those applicable in K1001

	Test conditions				Test	Limits		No. tested
						Min.	Max.	
	Vf	Va	Vg2	Vg1				
a	1.4	-	-	-	If (mA)	88	112	100% or 3
b	1.4	90	67.5	-7	Rev.Ig (uA)	-	1.0	100%
c	1.4	90	67.5	-7	Ia (mA)	5.1	9.7	100%
d	1.4	90	67.5	-7	Ig2 (mA)	0.85	2.1	100% or 3
e	1.4	90	67.5	-7	gm (mA/V)	1.3	1.85	100%
f	1.1	90	67.5	0	Ia (Note 1) (mA)	12	-	100%
g	1.4	90	67.5	-16.5	Ia (cut off) (uA)	-	200	100% or 3

NOTES

1. This is a snap test.