

SPECIFICATION MOS/CV.1971		<u>SECURITY</u>	
ISSUE NO.1	DATED 8.8.58	<u>SPECIFICATION</u>	<u>VALVE</u>
To be read in conjunction with K1001, BS.448 and BS.1409.		Unclassified	Unclassified

→ Indicates a change.

TYPE OF VALVE: Miniature Vari- μ H.F. Pentode.				<u>MARKING</u>		
CATHODE: Directly Heated.				See K1001/4.		
ENVELOPE: Glass.				<u>BASE</u>		
PROTOTYPE: CV 785.				BS.448/B7G.		
<u>RATINGS</u> (All limiting values are absolute)				<u>CONNECTIONS</u>		
				<u>PIN</u> <u>ELECTRODE</u>		
Filament Voltage	(V)	1.4	NOTES	1	Filament - ve,	f-ve+
Filament Current	(mA)	50		+ Suppressor	g3+sh	
Max. Anode Voltage	(V)	100		+ shield		
Max. Screen Voltage	(V)	75		2	Anode	a
Max. Cathode Current	(mA)	6.5		3	Screen Grid	g2
<u>TYPICAL OPERATING CONDITIONS</u>				4	No connection	NC
Anode Voltage	(V)	90		5	Filament - ve,	f-ve+
Screen Voltage	(V)	67.5		+ Suppressor	g3+sh	
Grid Voltage	(V)	0		+ shield		
Anode Current	(mA)	3.5		6	Control grid	g1
Screen Current	(mA)	1.4		7	Filament + ve	f+ve
Mutual Conductance	(mA/V)	0.9		<u>DIMENSIONS</u>		
Anode Impedance	(M Ω)	0.5		See BS.448/B7G/2.1		
Grid Bias (gm = 10 μ A/V)	(V)	-16		Size Ref. No.2.		
<u>CAPACITANCES (pF) NOTE A</u>				<u>DIMENSIONS</u> <u>MIN.</u> <u>MAX.</u>		
Cag (max.)		0.01	A Seated height			- 47.5
C out		7.5	C Diameter			16.0 19.0
C in		3.6	D Overall length			- 54.5
				<u>MOUNTING POSITION</u>		
				Any.		
<u>NOTES</u>						
A. Measured with a close fitting metal shield connected to the negative end of the filament.						

TESTS

To be performed in addition to those applicable in K1001.

CV.1971

	Test Conditions				Test	Limits		No. Tested
						Min.	Max.	
a	See K.1001 App.III. Measured on a 1 Mc/s bridge with valve mounted in a fully shielded socket. Valve screened.				<u>Capacitances.</u> Note 1			
					(1) C _{ag} (pF)	-	0.01	T.A.
					(2) C _{out} (pF)	5.3	9.7	6 per week
					(3) C _{in} (pF)	2.7	4.7	
b	V _f	V _a	V _{g2}	V _{g1}	I _f (mA)	44	56	100%
	1.4	-	-	-				
c	1.4	90	67.5	-2	-I _{g1} (μA)	-	1.0	100%
d	1.4	90	67.5	0	I _a (mA)	2.3	4.7	100%
e	1.4	90	67.5	0	I _{g2} (mA)	0.65	2.15	100%
f	1.4	90	67.5	0	g _m (mA/V)	0.66	1.13	100%
g	1.4	90	67.5	0	g _m (mA/V)	0.57	-	100%
h	1.4	90	67.5	-14.5	I _a tail (μA)	10	250	100%
→ j	The valve shall be inserted in at least one of the CV.1971 socket positions in the Amplifier Unit Type 455, 10U/16585 (part of Transmitter T.1946).				<u>Functional Equipment Test</u>	The equipment shall operate satisfactorily		T.A.