MINISTRY OF SUPPLY (D.L.R.D./R.A.E.)

VALVE ELECTRONIC **CV. 1971**

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

→ Indicates a change.

TYPE OF VALVE: Miniature Vari-μ H.F. Pentode.

CATHODE: Directly Heated.

ENVELOPE: Glass.

PROTOTYPE: CV 785.

MARKING

See K1001/4.

BASE

BS.448/B7G.

RATINGS
(All limiting values are absolute)

		NOTES
Filament Voltage (V)	1.4	
Filament Current (mA)	50	
Max. Anode Voltage (V)	100	
Max. Screen Voltage (V)	75	
Max. Cathode Current (mA)	6.5	

TYPICAL OPERATING CONDITIONS

Anode Voltage (V)	90	
Screen Voltage (V)	67.5	
Grid Voltage (V)	0	
Anode Current (mA)	3.5	
Screen Current (mA)	1.4	
Mutual Conductance (mA/V)	0.9	
Anode Impedance (MΩ)	0.5	
Grid Bias (gm = 10 μA/V) (V)	-16	

CAPACITANCES (pF) NOTE A

Cag (max.)	0.01
C out	7.5
C in	3.6

CONNECTIONS

PIN	ELECTRODE	
1	Filament - ve, + Suppressor + shield	f-ve+ g3+sh
2	Anode	a
3	Screen Grid	g2
4	No connection	NC
5	Filament - ve, + Suppressor + shield	f-ve+ g3+sh
6	Control grid	g1
7	Filament + ve	f+ve

DIMENSIONS

See BS.448/B7G/2.1
Size Ref. No.2.

DIMENSIONS	MIN.	MAX.
A Seated height	-	47.5
C Diameter	16.0	19.0
D Overall length	-	54.5

MOUNTING POSITION

Any.

NOTES

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 Min.	Limits Max.	No. Tested
a	See K.1001 App.III. Measured on a 1 Mc/s bridge with valve mounted in a fully shielded socket. Valve screened.				Capacitances. Note 1 (1) Cag (pF) (2) C out (pF) (3) C in (pF)	- 5.3 2.7	0.01 9.7 4.7	T.A. 6 per week
	Vf	Va	Vg2	Vg1				
b	1.4	-	-	-	If (mA)	44	56	100%
c	1.4	90	67.5	-2	-Ig1 (μA)	-	1.0	100%
d	1.4	90	67.5	0	Ia (mA)	2.3	4.7	100%
e	1.4	90	67.5	0	Ig2 (mA)	0.65	2.15	100%
f	1.4	90	67.5	0	gm (mA/V)	0.66	1.13	100%
g	1.4	90	67.5	0	gm (mA/V)	0.57	-	100%
h	1.4	90	67.5	-14.5	Ia 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, 1CU/16585 (part of Transmitter T.1946).				Functional Equipment Test	The equipment shall operate satisfactorily		T.A.