ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV303**

Specification AD/CV303/Issue 4
Dated 18.2.46.
To be read in conjunction with K1001

SECURITY

Specification	Valve
~~Restricted~~ Unclass	~~Restricted~~ Unclass

TYPE OF VALVE:- Variable-mu H.F. Pentode.
CATHODE:- Indirectly heated.
ENVELOPE:- Glass, enclosed in metal shell.
PROTOTYPE:- EF22.

MARKING

See K1001/4.

RATING

		Note
Heater Voltage (V)	6.3	
Heater Current (A)	0.2	
Max. Anode Voltage (V)	550	A
Max. Anode Voltage (V)	300	
Max. Cathode Current (mA)	10	
Max. Anode Dissipation (W)	2	
Max. Screen Grid Voltage (V)	300	B
Mutual Conductance (mA/V)	2.2	C
Internal Resistance (MΩ)	1.2	C
Max. Screen Grid Dissipation (W)	0.3	

CAPACITANCES (pF. approx)

Cag	<0.002
Cae	6.4
Cg1e	5.5
Cg1h	<0.004

BASE AND CONNECTIONS

B8G (MOD.)

See K1001/AIV/D12 except for dimensions S max. = 32 mms.

Pin	Electrode
1	Heater
2	Anode
3	Grid 2
4	Grid 3, internal shield.
5	No connection
6	Grid 1
7	Cathode
8	Heater
Spigot	Metal shell

DIMENSIONS

See drawing, Page 3.

NOTES

A. For Ia = 0 mA.
B. For Ia < 3 mA.
C. Measured at Va = 250 V, Vg2 = 100 V, Vg1 = -2.5 V and Ia = 6.0 mA.

Packing see K1005

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions					Test	Limits		No. Tested	Note
	Vh (V)	Va (V)	Vg3 (V)	Vg2 (V)	Vg1 (V)		Min.	Max.		
a	6.3	-	-	-	-	Ih (A)	0.192	0.208	100% or S	
b	6.3	30 (AC)	30 (AC)	30 (AC)	30 (AC)	Ie (mA)	49	-	100%	
c	6.3	300	0	100	0	Ia (mA)	10.5	15.5	100%	
d	6.3	300	0	100	-6	Ia (mA)	1.3	2.7	100%	
e	6.3	300	0	100	-27	Ia (μA)	-	15	100%	1
f	6.3	300	0	100		Ig2 (mA)	1.3	1.9	100%	2
g	6.3	300	0	100		Reverse Ig (μA)	-	0.6	100%	2
h	6.3	150 V between H and C (cathode positive).				Insulation (μA)	-	45	100%	3

NOTES

1. Protective Resistance of 1 MΩ in anode circuit.
2. Cathode Resistance of 330Ω.
3. Protective Resistance of 1 MΩ in series.

OUTLINE DIMENSIONS

CV303