ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV53**

Specification AD/CV53/Issue 4.
Dated 10.3.47.
To be read in conjunction with K1001, ignoring clauses:- 5.2; 5.3.

SECURITY	
Specn.	Valve
~~Restricted~~ Unclass	Unclassified

TYPE OF VALVE:- UHF triode with grounded grid.

CATHODE:- Indirectly heated. Oxide coated on one side only. Cathode strapped to one heater lead.

ENVELOPE:- Glass, unmetallised.

PROTOTYPE:- S26A.

MARKING

See K1001/4.

RATING		Note
Heater Voltage (V)	4.0	
Heater Current (A)	0.65	
Max. Anode Voltage (V)	350	
Grid Autobias Resistance (Ohms)	150	
Max. Anode Dissipation (W)	2	A
Amplification Factor	100	B
Mutual Conductance (mA/V)	5	B
Operating Frequency (Mc/s)	50-450	

CAPACITANCES (pF.)

Cag	1.7
Cgc	4.0
Cac	0.035

DIMENSIONS AND CONNECTIONS

See Fig.1.

NOTES

A. With adequate cooling.

B. At Vh = 4.0 V, Va = 250 V, Vg autobias resistance = 150 ohms.

PACKING

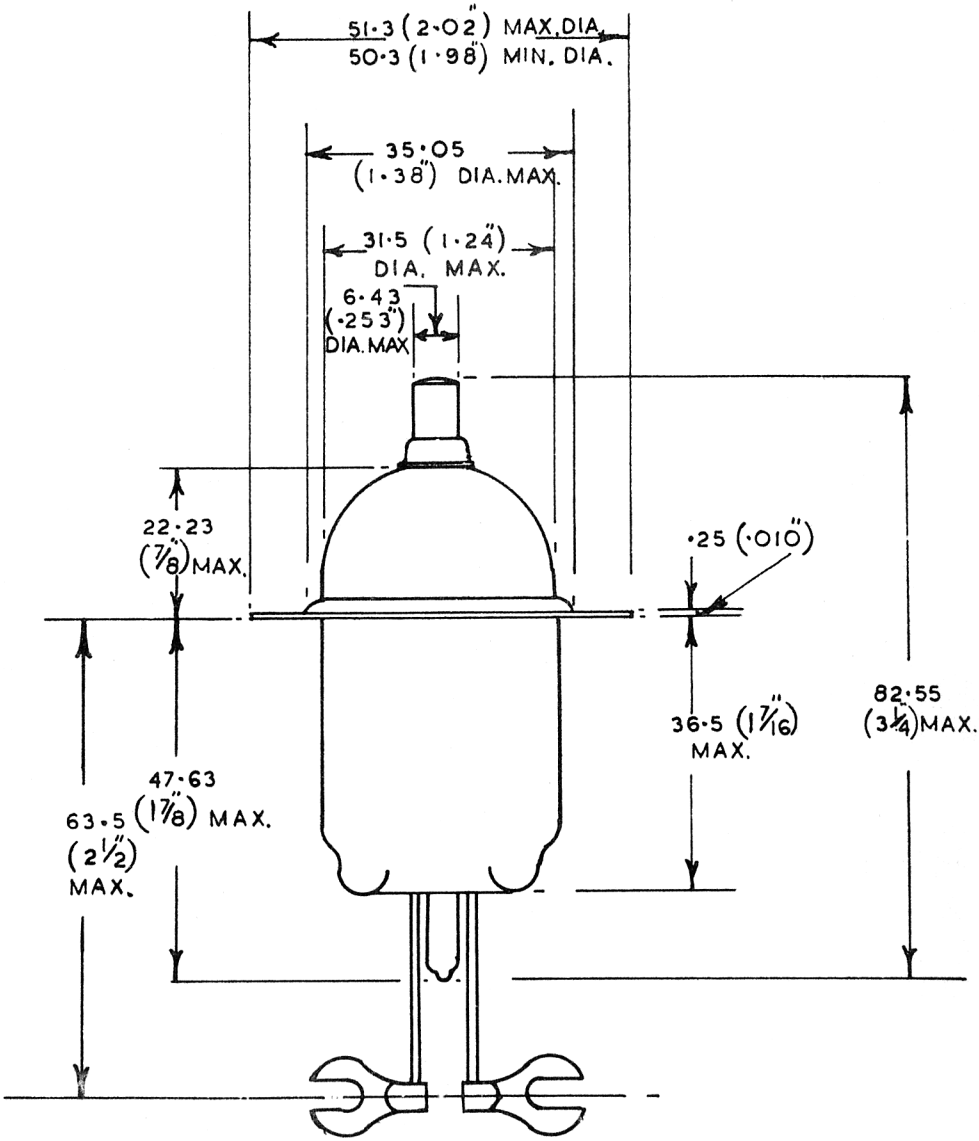
See K1001/7.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. Tested
	Vh (V)	Va (V)	Vg (V)		Min.	Max.	
a	4.0	0	0	Ih (A)	0.575	0.725	100%
b	4.0	250	auto-	Ia (mA)	3.75	9.0	100%
c	4.0	250	bias	Slope (Dynamic measurement) (mA/V)	4.5	-	100%
d	4.0	250	thro' 150 (ohms)	Amplification factor (Dynamic measurement)	85	-	100%
e	4.0	300	-1	Reverse Ig (µA)	-	1.0	100%
f	0	0	0	Capacitances (pF.)			
	With valve cold and earthed shield around bulb.			i. Cag	-	1.9	6 per week
				ii. Cgc	3.0	5.5	
				iii. Cac		0.045	T.A.
g	Valve tested in approved apparatus.			Equivalent noise Resistance (ohms)	-	700	100%

FIG 1.



CONNECTIONS

ANODE. _____ TOP CAP.
FILAMENT. _____ FLEXIBLE LEADS,
CATHODE. _____ CONNECTED TO ONE FILAMENT LEAD THE SPADE ON THIS LEAD TO BE PAINTED RED.

ALL DIMENSIONS ARE IN MILLIMETRES, EXCEPT WHERE OTHERWISE STATED.