MINISTRY OF AIRCRAFT PRODUCTION (D.C.D.)

VALVE ELECTRONIC **CV1553** (VT4B)

Specification MAP/CV1553/Issue 7
Dated 24.10.45.
To be read in conjunction with K1001 ignoring clauses 5.2, 5.8.

SECURITY	
Specification	Valve
RESTRICTED	RESTRICTED

→ Indicates a change

TYPE OF VALVE: Triode

CATHODE: Directly heated

ENVELOPE: Glass - unmetallised

MARKING

See K1001/4

RATING			Note
Filament Voltage	(V)	18.0	
Filament Current	(A)	5.15	
Maximum Anode Voltage	(kV)	5	
Maximum Anode Dissipation	(W)	450	
Mutual Conductance	(mA/V)	1.5	A
Amplification Factor		30	A
Anode Impedance	(Ω)	20,000	A

BASE

None

Flexible leads

CONNECTIONS

The anode and filament leads shall be brought out at opposite ends of the valve, and the grid lead, if not brought out to a side connection shall be brought out with the filament leads. The leads shall be securely bound in their insulating sleevings to the lips of the valve and shall be 14 inches in length clear of the bindings.

DIMENSIONS

See K1001/A1/D3

Dimension		Min.	Max.
A	(mm)	-	325
B	(mm)	-	165
C	(mm)	-	65
D (if reqd.)	(mm)	-	30
E	(mm)	-	17

NOTE

A:- Va = 2000, Vg = 0

PACKING

See K1001/7.3

To be performed in addition to those applicable in K1001

Clause	Test Conditions				Test	Limits		No. Tested
	Vf	Va	Vg	Ia(mA)		Min.	Max.	
(a)	18.0	0	0	-	If (A)	4.9	5.4	100%
(b)	18.0	Pulsed to 700V. G and A strapped		-	Peak Ic (mA)	750	-	100%
(c)	18.0	2000	0	-	Ia (mA)	47	63	100%
(d)	18.0	5000	-	90	Vg variation, during last 3 mins. (V) The variation shall have ceased within the 4 min. period.	-	±10	100%
	Conditions maintained for 4 minutes.							
(e)	18.0	10,000	-	30	As in test (d)	-	±10	100%
	Conditions maintained for 4 minutes							
(f)	18.0	2000	0	-	Ra (Ω)	17,000	23,000	100%
(g)	18.0	2000	0	-	/u	28.5	37.5	100%
(h)	OSCILLATION TEST The valve shall be tested for a period of 10 minutes in a suitable oscillatory circuit at a frequency of 300 ± 15 kc/s. With a mean anode voltage of 5000 volts, power input of 1000 watts and an anode dissipation not exceeding 350 watts, the valve shall show no signs of breakdown.							100%