VALVE ELECTRONIC

CV 315

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

Specification MOSA/CV315 Issue 6 Dated 1.11.54 To be read in conjunction with B.S.1409 and K1001	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

---------→ Indicates a change

TYPE OF VALVE - Triode, R.F. Amplifier Oscillator

CATHODE - Directly heated, thoriated tungsten

ENVELOPE - Glass, unmetallised

PROTOTYPE - DET 12, 4304 C.B.

MARKING

See K.1001/4

BASE

B4

		Note
Filament Voltage	(V) 7.5	
Filament Current	(A) 3.2	
Max. Anode Voltage	(V) 1250	
Max. Anode Dissipation	(W) 50	
Amplification Factor	10	A
Anode Impedance	(Ω) 5000	A
Mutual Conductance	(mA/V) 2	
Max. Frequency for above ratings	(Mc/s) 100	

CONNECTIONS

Pin	Electrode
1	N.C.
2	N.C.
3	f
4	f
TC1	a
TC2	g

CAPACITANCES (pF)

C in (Max.)	2.5
C out (Max.)	1.0
Ca, g (Max.)	3.5

TOP CAPS AND DIMENSIONS

See Page 3

PACKING

See R.A.E. Drawing RAD.18925

NOTE

A. Va = 1000V, Ia = 50 mA

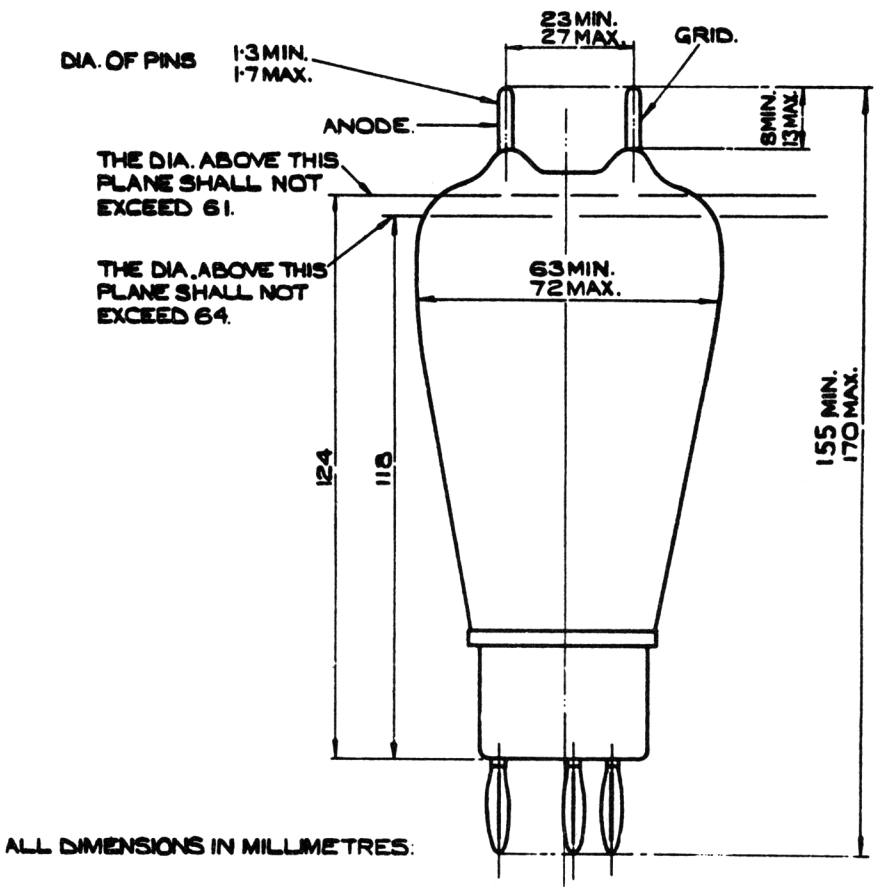
B. Valves to be supplied in matched pairs which must agree in grid voltage to within 3V in test (d). In addition to the normal marking, cartons are to be marked with the words "one pair of matched valves". ←

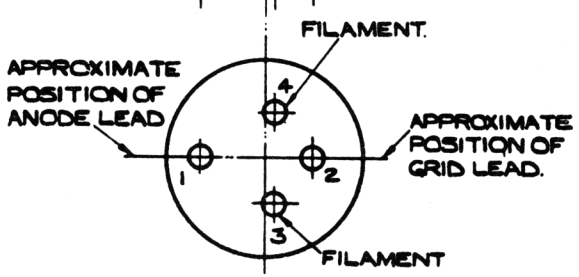
To be performed in addition to those applicable in K.1001

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested	Note
a	See K.1001/AIII Measured using Adaptor Type 35 (Ref. No. 10A/13331)				CAPACITANCES (pF)				
	Links to H.P.	Links to L.P.	Links to E						
	TC2	3,4	1,2,5,6,7,8,9,10,TC1		C in	-	2.5	6	
	TC1	3,4	1,2,5,6,7,8,9,10,TC2		C out	-	1.0	per	
	TC1	TC2	1,2,3,4,5,6,7,8,9,10		Ca,g	-	3.5	Week	
	Vf (AC or DC)	Vg	Va	Ia (mA)				100%	
b	7.5	0	0	0	If (A)	2.8	3.6	or S	
c	adjusted	0	1000	10	Vf (Emission Test) (V)	-	4	100%	
d	7.5 D.C. 7.5 A.C.	Adjust	800	60	Vg (V)	-30 -34	-50 -54	100%	
e	7.5	Adjust	800	50	Change in Vg from value in test (d) (V)	3	6	100%	
f	7.5	Adjust	1000	50	Change in Vg from value in test (e) (V)	18	24	100% or S	
g	7.5	Adjust	1000	50	Reverse Ig (after three minutes) (μA)	-	2	100%	
h	7.5	-100	1000	-	Ia (mA)	-	20	100%	
j	DYNAMIC TEST The valve will be tested as an amplifier at a frequency of 125 Mc/s in Transmitter T1131A using Drive Unit Type 26 to give a D.C. grid current of not less than 10 mA. In this equipment the following conditions exist:- Va = 900V, Rgl = 6.8 kΩ, Rk = 1 kΩ The R.F. Power output from the anode circuit shall not be less than 50W.							T/A	

NOTES

CV315





VIEW OF UNDERSIDE OF BASE

NOTE:- ANODE AND GRID LEADS TO LIE ON THE SAME SIDES OF CENTRE LINE AND IN THE SAME PLANE AS BASE PINS Nos 1&2, RESPECTIVELY.