MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC

CV668

Specification M.A.P./CV.668
Issue 1 Dated 13.10.50.
To be read in conjunction with K1001

SECURITY	
Specification	Valve
UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Transmitting Triode

CATHODE - Directly Heated Thoriated Tungsten

ENVELOPE - Glass, Unmetallised

PROTOTYPE - 35T

MARKING

See K1001/4

BASE

USM4B

RATING

			Note
Filament Voltage	(V)	5.0	
Filament Current	(A)	3.8	
Max. Anode Voltage	(kV)	2.0	
Max. Anode Dissipation	(W)	35	
Max. Grid Current	(mA)	35	
Amplification Factor		39	
Max. Frequency for above ratings	Mc/s	100	

CAPACITANCES (pF)

Cga (nom)	1.65	
Cge (nom)	2.60	
Cae (nom)	.225	

CONNECTIONS

Pin	Electrode
1	Filament
2	No connection
3	Grid
4	Filament
TOP CONNECTOR	Anode

DIMENSIONS

See K1001/A1/D1

Dimension	Min.	Max.
A	5.250"	5.500"
B	-	1.813"

TOP CONNECTOR

Dimension	Min.	Max.
Length	.312"	-
Diameter	.065"	.071"

CV668

Tests

To be performed in addition to those applicable in K1001

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested	Note
a	See K1001/A111 Measurements to be made in Adapter Type				CAPACITANCE (pF)				
	Links to H.P.	Links to L.P.	Links to E						
	3	TC1	1,2,4,5,6,7, 8,9,10,TC2.		Cga	1.4	2.2	6 per week	
	3	1,4	2,5,6,7,8,9, 10,TC1,TC2.		Cge	3.0	5.0		
	TC1	1,4	2,3,5,6,7,8, 9,10,TC2.		Cae	0.08	0.23		
	Vf (V)	Va (kv)	Vg (V)	Ia (mA)					
b	5.0	0	0	0	If (A)	3.6	4.2	100% or S	
c	5.0	1.0	Adjust	35	Vg1 (V)	-6.0	-11.5	100%	
d	5.0	1.0	Adjust	35	Reverse Ig (μA)	-	15	100%	
e	5.0	1.0	Adjust	35	μ	35	43	100% or S	
f	5.0	See Note 1			Peak Emission (A)	2.0	-	100%	1
g	5.0	See Note 2			Power Oscillation (W)	45	-	T.A.	2

NOTES

1. The test is performed with Anode and Grid strapped. Peak applied voltage 2.5 kV; Tp = 2 μ Secs. PRF = 50 per sec. The pulse shape is half sine wave.

2. The valve shall be tested in an oscillatory circuit at a frequency of 8.0 Mc/s under the following conditions:- Va = 1000 V. DC.; Ia = 80 mA DC.; Rg = 2500 Ω; Ig = 20 mA DC.