VALVE ELECTRONIC

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

CV309

Specification MAP/CV309 Issue 3 Dated 24.4.52 To be read in conjunction with K1001.	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

——► Indicates a change

TYPE OF VALVE - R.F. Beam Power Amplifier

CATHODE - Indirectly Heated

ENVELOPE - Glass-lower portion in metal shell.

PROTOTYPE - CV1510 with plated pins.

MARKING

See K1001/4.

BASE

B9G

RATING

Heater Voltage	(V)	6.3	
Heater Current	(A)	0.6	
Max. Anode Voltage	(V)	400	
Max. Screen Voltage	(V)	250	
Max. Anode Dissipation	(W)	7.5	
Max. Screen Dissipation	(W)	1.75	
Mutual Conductance	(mA/V)	3.0	A
Max. Operating Frequency	(Mc/s)	150	
Efficiency as Class C Amplifier at 150 Mc/s.		45%	

CONNECTIONS

Pin	Electrode
1	Heater
2	Anode
3	Screen Grid
4	Screen Grid
5	Shield and Beam Plates
6	Cathode
7	Control Grid
8	Shield and Beam Plates
9	Heater

CAPACITANCES (pF)

Cae	5.4	
Cge	8.2	
Cag	0.07	

DIMENSIONS

See K1001/A1/D2, with the metal sole cut away to leave no metal within a circle radius 3.2 mm. round the anode pin.

NOTES

A:- At Va = 250, Vg2 = 135, Vg1 = -10.

Ia = 30 mA.

To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested
a	Measured using Adaptor Type 39. Ref. 10A/13335. See K1001/AIII.				CAPACITANCES (pF)			
	Links to H.P.	Links to L.P.	Links to E.					
	2	1,3,4,5,6, 8,9,10.	7,TC1, TC2.		1. Cae	5.2	6.8	6 per week
	7	1,3,4,5,6, 8,9,10.	2,TC1, TC2.		2. Cge	7.0	9.4	
	2	7	1,3,4,5, 6,8,9,10, TC1,TC2.		3. Cag	-	0.09	T.A.
	Vh	Va	Vg2	Vg1				
b	6.3	0	0	0	Ih (A)	0.54	0.66	100% or S
c	6.3	250	135	-10	Ia (mA)	20	40	100%
d	6.3	250	135	-10	Ig2 (mA)	-	5.0	100% or S
e	6.3	250	135	-10	gm (mA/V)	2.25	3.75	100%
	Peak grid swing ± 1.0V. max.							
f	6.3	250	135	-10	Reverse Ig1 (μA)	-	2.0	100%
g	6.3	250	135	-50	Ia (mA)	-	1.0	100%
h	6.3	30 AC	30 AC	30 AC	Mean Ic (mA)	45	-	100% ←
		Strapped						
j	The valve shall operate satisfactorily at 150 Mc/s.							T.A.