

Specification MAP/CV1080/Issue 4 Dated 5.3.47. To be read in conjunction with K1001.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> RESTRICTED

→ Indicates a change

<u>TYPE OF VALVE</u> - Pentode <u>CATHODE</u> - Directly heated <u>ENVELOPE</u> - Glass - unmetallised <u>PROTOTYPE</u> - 4307A		<u>MARKING</u> See K1001/4	
<u>RATING</u>		<u>BASE</u>	
		B7	
		Pin	Electrode
Filament Voltage (V)	5.5	1	Control grid
Filament Current (A)	1.0	2	Suppressor grid
Max. Anode Voltage (V)	700	3	Screen grid
Max. Screen Voltage (V)	300	4	Filament
Max. Anode Dissipation (W)	15	5	Filament
Mutual Conductance (mA/V)	4.2	6	No connection
Inner Amplification Factor	7.0	7	No connection
Max. Operating Frequency (Mc/s)	10.0	T.C.	Anode
		<u>TOP CAP</u>	
		See K1001/AI/D5.1	
		<u>DIMENSIONS</u>	
		See K1001/AI/D1	
		Dimension	Min.      Max.
		A      (mm)	-      152.5
		B      (mm)	-      54
<u>NOTE</u>			
A. $V_a = V_{g2} = 250.$ , $V_{g1} = -20.$			

To be performed in addition to these applicable in K1001.

	Test Conditions						Test	Limits		No. Tested	Notes	
	Vf	Va	Vg2	Vg1	Vg3	Ia(mA)		Min.	Max.			
a	5.5	0	0	0	0	0	If (A)	0.95	1.15	100% or S		
b	5.5	250	250	-	0	60	Reverse Ig ( $\mu$ A)	-	5.0	100%	1	
c	5.5	250	250	-20	0	-	Ia (mA)	35.0	65.0	100%		
d	5.5	250	250	-20	0	-	Ig2 (mA)	3.0	8.0	100% or S		
e	5.5	250	250	-20	0	-	gm (mA/V)	2.9	5.0	100%		
		Peak grid swing <sup>+</sup> -1V. max.										
f	5.5	250	250	-20	0 to -20	-	Ia drop (mA)	5.0	-	100%		
g	5.5	250	250	-20	0	-	Inner $\mu$	6.0	8.0	100% or S	2	
h	5.5 to 5.0	250	250	-20	0	-	Ia drop (mA)	-	6.0	100%		

NOTES

1. In test 'b' the valve shall be run for a period of 2 minutes before the grid current measurement is made.
2. In test 'g' the anode and screen can be strapped and connected to a common H.T. supply.