

Specification MAP/CV139/Issue 2 Dated 15.1.49 To be read in conjunction with K1001	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

<u>TYPE OF VALVE</u> - Miniature grounded - grid triode.			<u>MARKING</u> See K1001/4	
<u>CATHODE</u> - Indirectly heated			<u>PACKING</u> See K1005	
<u>ENVELOPE</u> - Glass			<u>BASE</u> B7G	
<u>RATING</u>		Note	<u>Pin</u> <u>Electrode</u>	
Heater Voltage	(V) 6.3		1	Grid
Heater Current	(A) 0.3	2	Cathode	
Max. Anode Volts	(V) 250	3	Heater	
Max. Anode Dissipation	(W) 2.5	4	Heater	
Max. Mean Cathode Current	(mA) 15	5	Cathode	
Mutual Conductance	(mA/V) 9.0	6	Grid	
Amplification Factor	100	7	Anode	
Min. Grid Voltage to be available to ensure cut-off to a slope of 100 $\mu$ A/V	(V) -8			
Max. h-k Voltage	(V) 150			
Max. gl-k Voltage	(V) 100			
Max. Operating Frequency	(Mc/s) 250			
			<u>DIMENSIONS</u> See K1001/AT/D4	
<u>CAPACITANCES (pF)</u>				
Ca - ch	0.1	C		
Cg - ch	5.1	C		
Cag	3.6	C		
Chc	8.6	C		

NOTES

- A. Without can.
- B.  $V_a = 250V.$ ,       $V_g = -1.5V.$ ,       $I_a = 10mA.$
- C. Measured at frequency of 1.0 Mc/s. with close fitting metal can connected to grid.

CV139

TESTS

To be carried out in addition to those applicable in K1001

	Test Conditions			Test	Limits		No. Tested	Note
					Min.	Max.		
a	Measured with close fitting metal can and at a frequency of 1.0 Mc/s. Can connected to grid. Using Adaptor type 124 Ref.10AD/9			Capacitances (pF)				
	Links to							
	H.P.	L.P.	E					
	7	2,3,4,5	1,6,8,9,10 TC.1, TC.2	Ca - ch	-	.2	T.A.	
	1,6,8,9	2,3,4,5	7 and 10 TC.1, TC.2	Gg - ch	4.3	5.7	6 per week	
	7	1,6,8,9	2,3,4,5,10 TC.1, TC.2	Cag	3.1	4.1		
	2,5	1,3,4,6,8 and 9	7 and 10 TC.1, TC.2	Chc	6.6	10.6		
	Vh	Va	Vgl	Ia(mA)			100% or S	
b	6.3	0	0	0	Ih (A)	0.27		0.33
c	6.3	250	-	10	Vg (V)	-1	-2	100%
d	6.3	250	-	10	gm (mA/V)	7	10	100%
e	6.3	250	-	10	-I <sub>g</sub> (μA)	-	0.5	100%
f	6.3	250	-5	-	Ia (mA)	-	0.75	100%
g	6.3	250	-	10	Equivalent noise resistance (ohms) with grid earthed.	-	400	T/A