

Specification MAP/CV139/Issue 2 Dated 15.1.49 To be read in conjunction with K1001	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification</td><td>Valve</td></tr> <tr> <td>RESTRICTED Unclassified</td><td>UNCLASSIFIED</td></tr> </table>	SECURITY		Specification	Valve	RESTRICTED Unclassified	UNCLASSIFIED
SECURITY							
Specification	Valve						
RESTRICTED Unclassified	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>RATING</u>			<u>BASE</u> B7G	
Heater Voltage	(V)	6.3		
Heater Current	(A)	0.3		
Max. Anode Volts	(V)	250		
Max. Anode Dissipation	(W)	2.5		
Max. Mean Cathode Current	(mA)	15		
Mutual Conductance	(mA/V)	9.0		
Amplification Factor		100		
Min. Grid Voltage to be available to ensure cut-off to a slope of 100 μ A/V	(V)	-8		
Max. h-k Voltage	(V)	150		
Max. gl-k Voltage	(V)	100		
Max. Operating Frequency	(Mc/s)	250		
<u>CAPACITANCES (pF)</u>			<u>DIMENSIONS</u> See K1001/AI/D4	
Ca - ch		0.1		
Cg - ch		5.1		
Cag		3.6		
Chc		8.6		

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		Cg - 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		
b	Vh	Va	Vg1	Ia(mA)	Ih (A)	0.27	0.33	100% or S	
	6.3	0	0	0					
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	-Ig (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	