

VALVE ELECTRONIC CV 278

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV278/Issue 4. Dated : 9.4.54. To be read in conjunction with K1001.	<table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <td><u>Specification</u></td><td><u>Valve</u></td></tr> <tr> <td>Unclassified</td><td>Unclassified</td></tr> </table>	<u>SECURITY</u>		<u>Specification</u>	<u>Valve</u>	Unclassified	Unclassified
<u>SECURITY</u>							
<u>Specification</u>	<u>Valve</u>						
Unclassified	Unclassified						

→ Indicates a change

<u>TYPE OF VALVE:-</u> Double Triode with separate cathodes.				<u>MARKING</u>			
<u>CATHODE:-</u> Indirectly heated.				See K1001/4.			
<u>ENVELOPE:-</u> Glass, unmetallised.				<u>BASE</u>			
<u>PROTOTYPE:-</u> E1606 (6SN7GT with longer envelope).				IO			
				See K1001/AIV/D2.			
<u>RATING</u> (for single triode)			Note				
Heater Voltage	(V)	6.3	A B A	Pin	Electrode		
Heater Current	(A)	0.6		1	G1		
Max. Anode Voltage	(V)	330		2	A1		
Average Anode Current	(mA)	9.0		3	C1		
Mutual Conductance	(mA/V)	3.0		4	G2		
Amplification Factor		20		5	A2		
Max. Anode Dissipation	(W)	2.75		6	G2		
Max. Cathode Current	(mA)	20		7	H		
				8	H		
				<u>DIMENSIONS</u>			
				See K1001/AI/D1.			
<u>CAPACITANCES (pF)</u>							
<u>Triode I and II</u>							
Cag		4.1	Dimension			Min.	Max.
Cgc		3.7	A mm			82.3	87.3
Cac		1.6	B mm			-	34

NOTES

- A. At $V_a = 250$ V, $V_g = -8$ V.
B. At $V_a = 90$ V, $V_g = 0$.

TESTS

To be performed in addition to those applicable in K1001.

Unless otherwise stated the tests shall be applied to each triode separately.

	Test Conditions			Test	Limits		No. Tested	Note
	Vh (V)	Va (V)	Vg (V)		Min.	Max.		
a	6.3	-	-	Ih (A)	0.55	0.65	100%	
b	6.3	250	-8	Reverse Ig (μ A)	-	2.0	100%	1
c	6.3	250	-8	Ia (mA)	5.5	12.5	100%	
d	6.3	250	-24	Ia tail (μ A)	-	5	100%	
e	6.3	90	0	gm (mA/V)	2.4	3.6	100%	
f	6.3	250	-8	gm (mA/V)	2.0	3.1	100%	
g	6.3	250	-8	Amplification Factor	18	23	100% or 8	
h	6.3	30		Ie (mA)	4.0	-	100%	

NOTE

1. During this test the valve shall be connected as a single triode.