

Specification MOS(A)/CV1862	<u>SECURITY</u>	
Issue 3 Dated 18.6.54	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K1001	UNCLASSIFIED	UNCLASSIFIED

—————> Indicates a change

TYPE OF VALVE - Beam Tetrode				<u>MARKING</u>			
CATHODE - Indirectly-heated				See K1001/4			
ENVELOPE - Glass - Unmetallised				Additional Marking - 6AQ5			
PROTOTYPE - 6AQ5				(See Note D)			
RETMA DESIGNATION - 6AQ5							
<u>RATING</u>				<u>BASE</u>			
				B7G			
				<u>CONNECTIONS</u>			
				<u>Pin</u> <u>Electrode</u>			
Heater Voltage	(V)	6.3		1	Control Grid		
Heater Current	(A)	0.45		2	Cathode and Beam		
Max. Anode Voltage	(V)	275	A		Plates		
Max. Screen Voltage	(V)	275	A				
Max. Anode Dissipation	(W)	13.2	A	3	Heater		
Max. Screen Dissipation	(W)	2.2	A	4	Heater		
Mutual Conductance	(mA/V)	4.1	B	5	Anode		
Anode Impedance	(ohms)	52000	B	6	Screen Grid		
				7	Control Grid		
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u>			
C <sub>ge</sub>		7.6	C	See K1001/A1/D4.			
C <sub>ae</sub>		6.0	C				
C <sub>ag</sub>		0.35	C				
				<u>Dimension (mm)</u> <u>Min.</u> <u>Max</u>			
				A - 66.8			
				B - 19			
				<u>MOUNTING POSITION</u>			
				Any			
<u>NOTES</u>							
A. Absolute maximum value.							
B. Measured at: V <sub>a</sub> = V <sub>g2</sub> = 250V; V <sub>g3</sub> = 0; V <sub>g1</sub> = -12.5V							
C. Measured without a metal screen							
D. In addition to the requirements of K1001/4, the RETMA designation shall also be clearly and indelibly marked on the valve.							

To be performed in addition to those applicable in K1001

Test Conditions						Test	Limits		No. Tested	Note
	Vh (V)	Va (V)	Vg3 (V)	Vg2 (V)	Vg1 (V)		Min	Max		
a	6.3	-	-	-	-	Ih (A)	0.41	0.49	100% or S	
b	6.3	-	-	-	-	Ihc ( $\mu$ A)	-	50	100%	1
c	6.3	250	0	250	-12.5	Reverse Igl ( $\mu$ A)	-	2	100%	
d	6.3	250	0	250	-12.5	Ia (mA)	33	57	100%	2
e	6.3	250	0	250	-12.5	Ig2 (mA)	-	7.5	100% or S	
f	6.3	250	0	250	-12.5	gm (mA/V)	3	5.2	100%	
g	6.3	250	0	250	-12.5	Power Output (W)	3.6	-	Note 3	4
h	6.3	30	0	30	30	Emission (mA)	100	-	100%	5

NOTES

1. Vhc =  $\pm$  100V DC through 100k resistor.
2. Tested first with Pin 1 at voltage Vg1 and Pin 7 disconnected, and then with Pin 7 at voltage Vg1 and Pin 1 disconnected.
- 3. Test shall be performed in accordance with K1001/AXI AQL = 2.5%;  
Inspection Level = II
4. Signal Vg1 = 8.8V AC; load resistor = 5k
5. Test to be applied only for sufficient time to obtain a steady reading.