

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV1250/Issue 2. Dated 22.3.46. To be read in conjunction with K1001	<u>SECURITY</u>	
	<u>Specn.</u> Restricted	<u>Valve</u> Restricted

<u>TYPE OF VALVE:-</u> Transmitting Triode. <u>CATHODE:-</u> Directly Heated; thoriated tungsten. <u>ENVELOPE:-</u> Glass. <u>PROTOTYPE:-</u> 4279-A.	<u>MARKING</u> See K1001/4.
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<u>RATING</u>		Note	<u>BASE, CONNECTIONS AND DIMENSIONS</u>
Filament Voltage (V)	10.0		
Filament Current (A)	21.0		
Max. Anode Voltage (kV)	3.0	A, B.	<u>PACKING</u> See K1001/7.3
Max. Anode Current (A)	0.8	A	
Total Emission at 2.0 kV. (A)	8.0		
Amplification Factor	10	C	
Max. Anode Dissipation (W)	1200	A	
<u>CAPACITANCES (pF. approx.)</u>			
C <sub>ag</sub>	18.0		
C <sub>af</sub>	7.0		
C <sub>gf</sub>	15.0		

NOTES

- A. Maximum ratings for safe operation at a max. frequency of 20 Mc/s.
- B. For a frequency of 40 Mc/s, Max.  $V_a = 1.5$  kV.
- C. Measured at  $V_a = 2.5$  kV,  $I_a = 300$  mA,  $V_g = -170$  V.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits		No. Tested	Note
	Vf(V) A.C.	Vg1(V)	Va(V)	Ia(mA)		Min.	Max.		
a	10	-	-	-	If (A)	20	22	100% or S	1
b	10	2000	2000	-	Peak Emission(A)	8.0	-	100%	2
c	10	Adjust	2500	500	Reverse I <sub>g</sub> (μA)	-	15	100%	3
d	10	Adjust	2500	500	V <sub>g</sub> (V)	-110	-140	100%	
e	i	Record	3000	300	Diff. be- tween V <sub>g1</sub> in 'i' and 'ii' (V) (Amplifi- cation Factor)	26.4 (μ <sub>1</sub> = 11)	44.4 (μ <sub>1</sub> = 9)	100%	
	ii	Record	2600	300					
f	i	Adjust	2600	300	Diff. be- tween I <sub>a</sub> in 'i' (mA) and 'ii' (Anode Impedance)	87 (Z <sub>a</sub> = 2300 ohms)	118 (Z <sub>a</sub> = 1700 ohms)	100%	
	ii	Set as in 'i'	2400	Record					

NOTES

1. Filament to be heated by 50 c/s A.C. and the common return of both anode and grid circuits shall be to the centre point of the filament transformer secondary.
2. This test shall be carried out by the discharge of a condenser connected between anode and grid strapped, and the centre point of the filament transformer.
3. This test shall be maintained for 20 minutes. At the expiry of this period the reverse I<sub>g</sub> shall not exceed the value specified and shall not be rising.

