

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV1247/Issue 3. Dated 16.6.47. To be read in conjunction with K1001.	<u>SECURITY</u> <u>Specn.</u> <u>Valve</u> Restricted Unclassified
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<u>TYPE OF VALVE:-</u> Transmitting Triode.			<u>MARKING</u> See K1001/4.		
<u>CATHODE:-</u> Directly Heated, Pure Tungsten.			<u>CONNECTIONS</u> Flexible Leads - See Note B. Grid } At one end. Filament }		
<u>ENVELOPE:-</u> Glass, double-ended bulb.			Anode - At other end. Colours:- FF : Yellow G : Green A : Red		
<u>RATING</u>			Note		
Filament Voltage (V)	14.0				
Filament Current (A)	6.0				
Minimum Total Emission (mA)	300				
Maximum Anode Dissipation (W)	150				
Maximum Anode Voltage (V)	2000				
Mutual Conductance (mA/V)	2.4	A			
Amplification Factor	6.6	A			
Anode Impedance (ohms)	2750	A			
			<u>DIMENSIONS</u> See K1001/AI/D3.		
			Dimension	Min.	Max.
			A mm	230	250
			B mm	117	124
			C mm	53	57
			F mm	25	-
			H mm	-	125
			<u>PACKING</u> See K1005.		

NOTES

- A. At $V_a = 1000$ V, $V_g = 0$.
- B. LEADS. The leads are to be made up of four strands of 0.33 mm dia. copper or equivalents, and are to be 330 mm in free length. They are to be suitably insulated to within 50 mm of the free ends and coloured as above. They shall be bound back to the necks of the valve, the leads at each end being equally spaced around the neck. In the re-entrant part of the seal the leads are to be protected with glass beads, or glass tubing. The insulation on the leads must not be liable to slip; lead stops may be employed. The methods actually used will be checked at Type Approval or as necessary.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits		No. Tested
	Vf (V)	Va (V)	Vg (V)	Ia (mA)		Min.	Max.	
a	Insulation measured with 250 V or 500 V test set.				<u>Insulation (MΩ)</u> i. Anode to filament. ii. Anode to grid. iii. Grid to filament.	150	-	100%
b	14.0				If (A)	5.6	6.4	100%
c	14.0	AC 14 kV peak inv.			High Voltage Test.	There must be no sign of blue glow or deterioration.		Type Approval.
d	14.0	1200	Ad-justed.	125	<u>Dissipation.</u> i. Vg (V) ii. Variation of Vg after first min. (V) iii. Reverse Ig at end of test (μ A).	-50	-100	100% 100%
	For 10 minutes, Vg checked each minute.					-	5	100%
						-	20	

NOTE

1. The valve is accepted on the understanding that it will perform satisfactorily during a 5 minute oscillatory test with Vf = 14 V and Va adjusted to give dissipations as follows:-

Frequency (Kc/s).

Wa (W).

3,000
15,000
30,000
60,000

150
115
100
70