ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC CV1247 (NT83)

Specification AD/CV1247/Issue 3.
Dated 16.6.47.
To be read in conjunction with K1001.

SECURITY	
Specn.	Valve
Restricted	Unclassified

TYPE OF VALVE:- Transmitting Triode.

CATHODE:- Directly Heated, Pure Tungsten.

ENVELOPE:- Glass, double-ended bulb.

RATING

			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

MARKING

See K1001/4.

CONNECTIONS

Flexible Leads - See Note B.

Grid, Filament } At one end.

Anode - At other end.

Colours:-

FF : Yellow
G : Green
A : Red

DIMENSIONS

See K1001/A1/D3.

Dimension	Min.	Max.
A mm	230	250
B mm	117	124
C mm	53	57
F mm	25	-
H mm	-	125

PACKING

See K1005.

NOTES

A. At Va = 1000 V, Vg = 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 Vf (V)	Va (V)	Vg (V)	Ia (mA)	Test	Limits Min.	Limits Max.	No. Tested
a	Insulation measured with 250 V or 500 V test set.				Insulation (MΩ)			
					i. Anode to filament.	150	-	100%
					ii. Anode to grid.	150	-	100%
					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	Adjusted.	125	Dissipation.			
	For 10 minutes, Vg checked each minute.				i. Vg (V)	-50	-100	100%
					ii. Variation of Vg after first min. (V)	-	5	100%
					iii. Reverse Ig at end of test (μA).	-	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	150
15,000	115
30,000	100
60,000	70