MINISTRY OF SUPPLY (S.R.D.E.)

VALVE ELECTRONIC CV123

Specification: MOS/CV123/Issue 5 Dated:- 24.5.50 To be read in conjunction with K1001, ignoring clauses 4.1.1(a), 5.2, 5.8, 6.0, 7.1	SECURITY Specification ~~Restricted~~ Unclassified Valve Unclassified

→ indicates a change

TYPE OF VALVE:- Gas triode CATHODE:- Directly heated ENVELOPE:- Glass-unmetallised PROTOTYPE:- E.1330	MARKING See K1001/4. Additional Marking:- Colour Code (Note B)

RATING		Note	BASE
			None
Filament voltage (V)	1.5		
Max. Filament current (A)	0.17		DIMENSIONS AND CONNECTIONS
Max. Anode voltage (V)	100		See Fig. 1
Anode current (mA)	16	A	

NOTES

A. With Ra = 5000 ohms
Rg = 1.0 Megohm

B. A BLUE mark shall appear adjacent to the anode lead and the numbering shall be in BLUE

Dimension	Min	Max
A (mm)	-	33
B (mm)	-	10
Pip Length (mm)	-	6

PACKAGING
See K1005

TESTS

To be performed in addition to those applicable in K1001

	Test Conditions			Test	Limits		No. Tested
					Min.	Max.	
	Vf	Va	Vg				
a	1.5	-	-	If (A)	-	0.17	0.1% (10)
b	1.5	90	-	Critical Vg (V)	-2.1	-2.7	100%
	Ra = 5000 ohms			Note 4			
	Rg = 1 Megohm						
c	1.5	90	0	Critical Vg drift (±V)	-	0.2	100%
	Ra = 5000 ohms			Note 2			
	Rg = 1 Megohm						
d	1.5	90	-	Voltage drop (V)	-	20	100%
	Ra = 5000 ohms			Note 1			
	Rg = 1 Megohm						
e	1.5	90	-6	Discharge must be extinguished and must not re-strike by raising anode load momentarily to 10 Megohms. Note 3			100%
	Ra = 5000 ohms						
	Rg = 1 Megohm						
f	0	90	0	Insulation (MΩ) Anode to all	100	-	100%

NOTES

1. The initial reading is to be taken immediately on strike in test (d).

2. The maximum difference between three consecutive readings of critical grid voltage (taken within 1 minute), including that for the first strike, must not exceed 0.2 volts.

3. This test to be carried out in an apparatus in which the grid- cathode capacity does not exceed the anode-grid capacity.

4. The limits for special requirement (2), page 3, shall be -2.0 to -2.8.

SPECIAL REQUIREMENTS

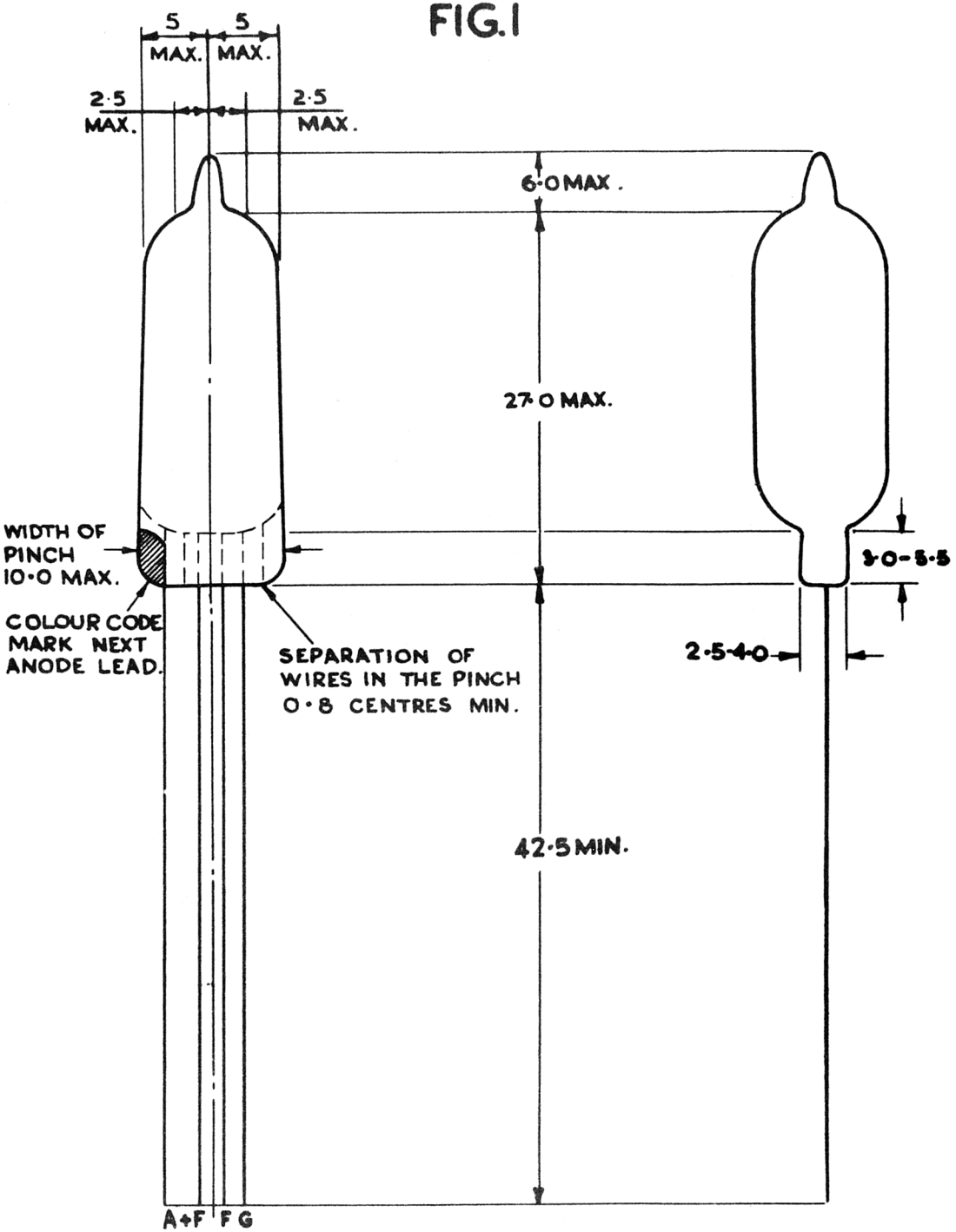
1. The valves are required for embodiment into receivers and for short period operation. They are not required for replacement or normal life.

2. The valves are required to have a long life in storage and shall meet the requirements of these tests after a holding period of not less than one month from the date of initial test.

3. Owing to the mechanical requirements of the valves, the materials used and the methods of manufacture shall conform to the Material and Inspection Schedules. These Schedules shall form part of this specification, and may be obtained from C.I.E.M.E.

4. A description of the Production Details, which may be obtained through the type approving authority, or their representative, is issued as an appendix to this specification. This shall not be regarded as a rigid specification, but the representative of the type approving authority shall be informed within twenty-four hours, of any deviations from the methods described therein, and the "lot" numbers concerned. The type-approving authority may call for samples, for comparison with the original samples for which type approval has been given.

FIG.1



ALL DIMENSIONS IN MMS.

SHAPE SHOULD BE APPROX. AS DRAWING.