ADMIRALTY SIGNAL ESTABLISHMENT

VALVE ELECTRONIC **CV161**

Specification AD/CV161/Issue 3 Dated 14.11.46. To be read in conjunction with K1001, ignoring clauses:- 5.2, 5.8.	SECURITY	
	Specn.	Valve
	Restricted	Unclassified

TYPE OF TUBE:- Vacuum photocell
CATHODE:- Silver-oxygen-caesium (on envelope)
ENVELOPE:- Glass, with photoelectric layer
PROTOTYPE:- VS26.

MARKING
See K1001/4.
Additional Marking
Serial No. .....

RATING

		Note
Min. sensitivity at Va = 100 V. (μA/lumen)	20	1
Min. sensitivity at Va = 20 V. (μA/lumen)	10	1
Frequency for peak sensitivity (Angstrom Units)	7,500 to 8,500	2

BASE
B4
See K1001/AIV/D1.

Pin	Electrode
1	Anode
2	No connection
3	No connection
4	No connection
TC	Cathode

NOTES
1. With illumination by incandescent lamp of normal colour temperature.
2. The spectral sensitivity corresponds to the normal published characteristics of a silver-oxygen-caesium photo-cathode.

TOP CAP
See K1001/AI/D5.4.

DIMENSIONS
See Fig. 1.

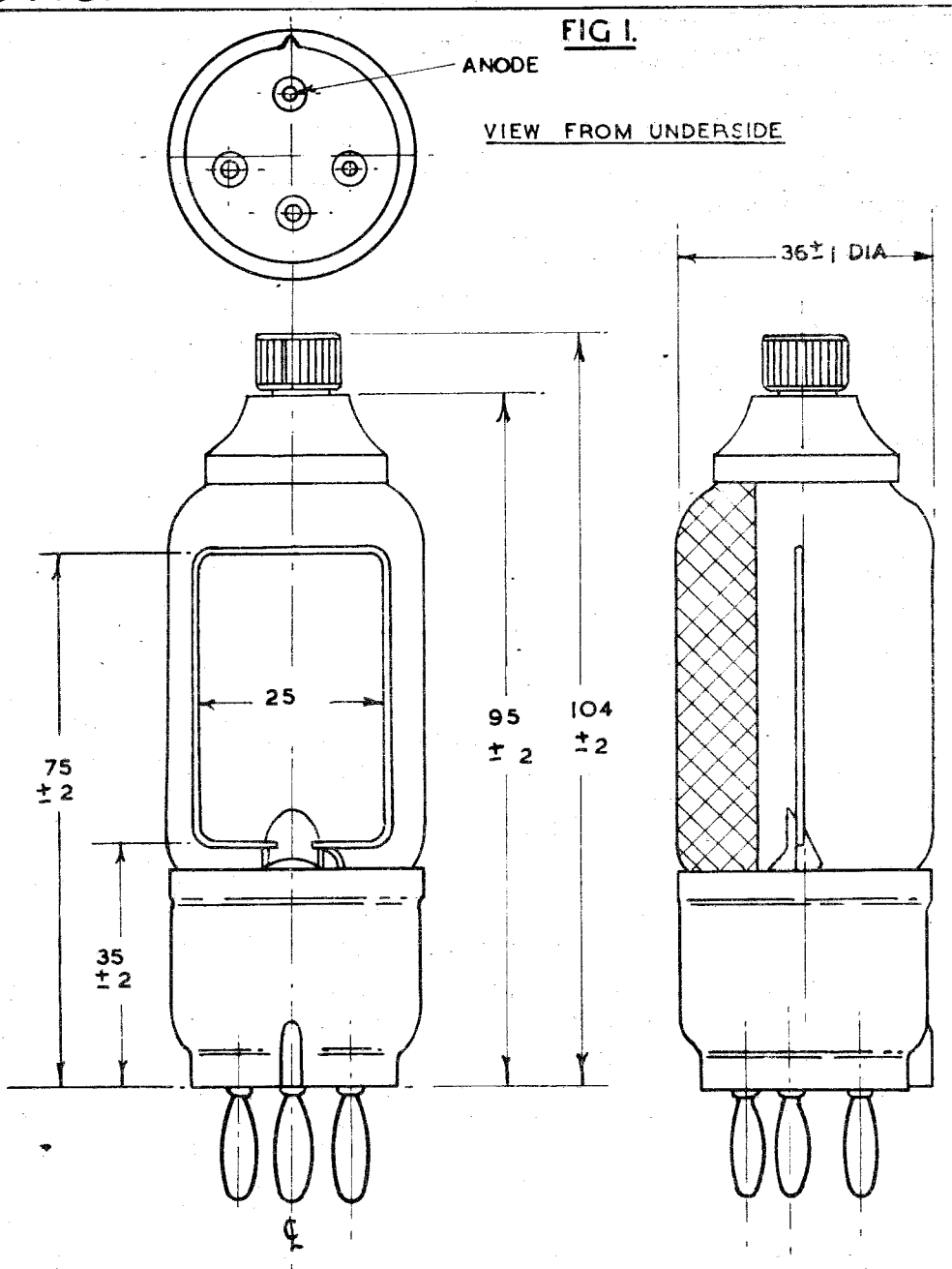
PACKING
See K1001/7.

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested
a	Cell exposed to light of intensity 0.1 lumen L.G. radiation of 200 c.p. incandescent lamp running at correct operating voltage, at 175 cm. from cell. Va = 100 V.	Photo-electric current Ia (μA)	2	-	100%
b	As in test 'a' but with Va = 20 V.	Ia (μA)	50% value in test 'a'	-	100%
c	As in test 'a' continuously and without variation, for 24 hours. Ia measured throughout test.	Ia (μA)	2	-	100%

FIG 1.



NOTES:-

1. THE PORTION OF THE GLASS WALL OPPOSITE THE ANODE WHICH IS COVERED BY THE PHOTOELECTRIC LAYER SHOULD COMPRISE AT LEAST THE AREA BOUNDED BY THE PROJECTION OF THE ANODE LOOP ON THE GLASS WALL OF THE CELL IN THE DIRECTION PERPENDICULAR TO THE PLANE OF THE ANODE LOOP.
2. ALL DIMENSIONS ARE IN MILLIMETRES.