VALVE ELECTRONIC

ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

CV5137

Specification AD/CV5137 Issue No. 1 dated 16.1.58 To be read in conjunction with K1001 ignoring Clauses 5.2 and 5.8.	SECURITY Specification: Unclassified Valve: Unclassified

TYPE OF VALVE: Crystal Protection Cell

PROTOTYPE: CV106/CV976

MARKING

See K1001/4

RATINGS

		Note
Operating Frequency (Mc/s)	3450 to 3614	
Min. Primer Operating Current (/uA)	100	A

DIMENSIONS

See Drawing on page 3.

NOTES

A. Primer current to be limited by a series resistance of which at least 1.0 Megohm must be adjacent to the valve.

TESTS

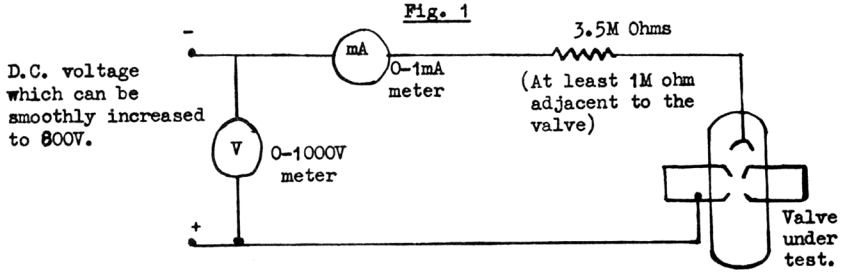
To be performed in addition to those applicable in K1001 and after a holding period of 7 days.

	Test Conditions	Test	Limits Min.	Limits Max.	No. Tested	Note
a	The transmission line shall be energised by not more than 100 mW RF. The frequency tuning range shall be obtained by adjusting the two tuners.	Frequency Range (Mc/s)	3450 to 3614	-	100%	1
b	Test shall be performed at least 7 days after any previous discharge. Note A page 1.	Primer Breakdown (Secs) The delay between the application of 800V D.C. primer voltage and the initial breakdown shall be measured.	-	5	100%	
c	The valve is to be tested in the circuit shown in Fig.1 and the applied voltage smoothly increased to 800V. A discharge must occur and the readings of voltage and current across the gap are to be noted.	i. Voltage between primer and resonator during discharge. (V) ii. Primer Current (mA)	250 100	450 150	100%	

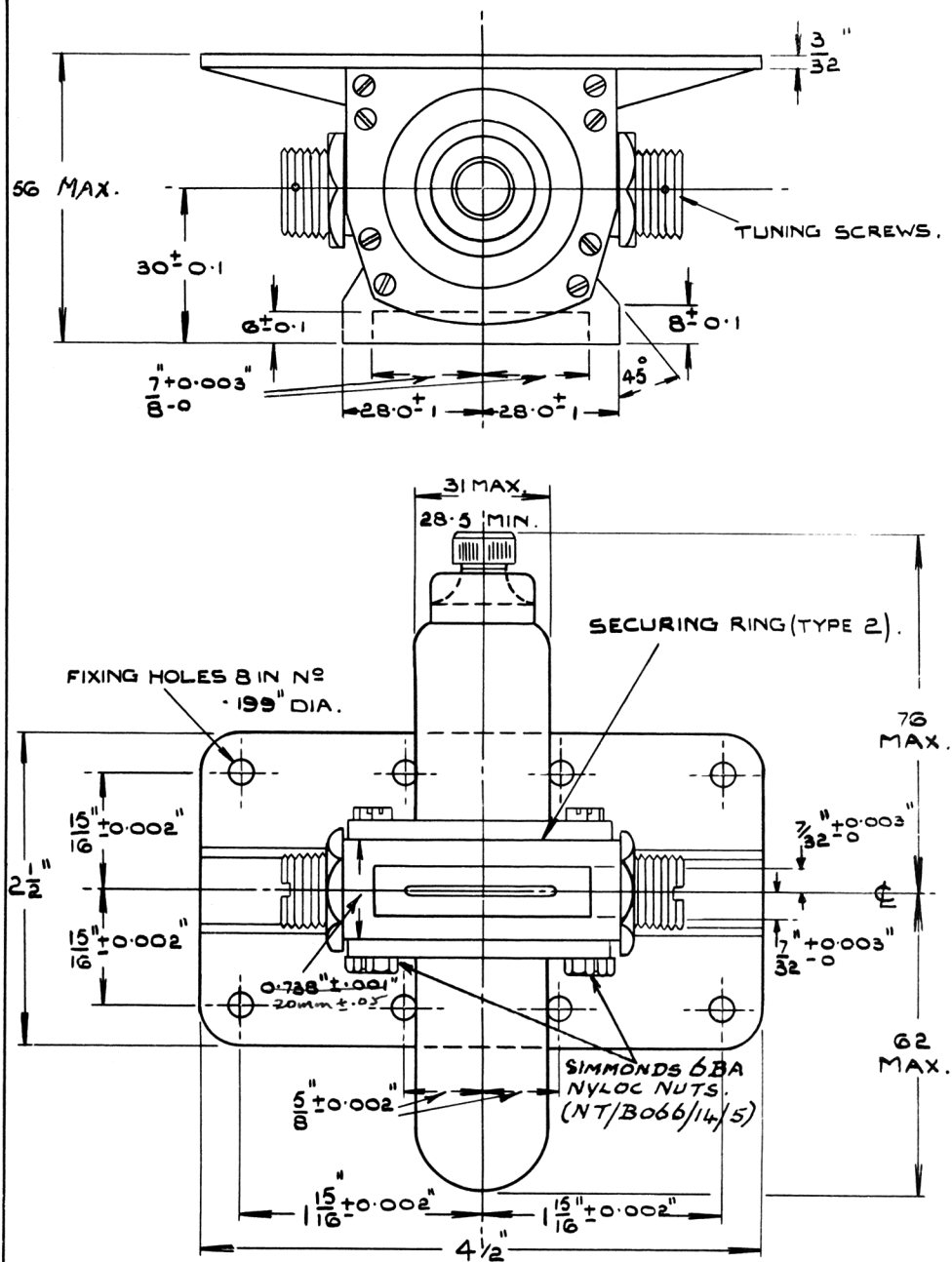
NOTES

1. The upper limit of the frequency range is found by turning the tuning slugs in as far as possible, and then measuring the resonant frequency of the cavity in that state. The lower limit of the frequency range is found by removing the tuning slugs, then screwing them two turns back into the cavity, and measuring the resonant frequency of the cavity in that state.

Fig. 1



OUTLINE DIMENSIONS



NOTES: ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.

2. APPLICATION SHOULD BE MADE TO THE SPECIFYING AUTHORITY FOR COPIES OF DETAILED DRAWINGS, No. B 206026 (ASSEMBLY ~~B~~ A)

SPECIFICATION FOR CV.5137 ISSUE NO. 1 DATED 16.1.58.

AMENDMENT NO. 1

Page 3 Amend dimension 0.738" ± 001" to read 20mm ± .05.

In Note 2,

Amend No. B206026 (Assembly b) to read (Assembly A).

January, 1959.

Admiralty Signal & Radar Establishment

N.54164/D

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION M.O.A./CV.5140 ISSUE 2 DATED 14.3.63

AMENDMENT NO. 1

Page 3. Outline Drawing

Delete "CAD. PLATED LEADS" (situated foot of outline drawing) and substitute "GOLD PLATED LEADS."

T.V.C. for R.A.E.

June, 1963.

N.163866