

Specification MAP/CV111/Issue 4.
Dated 15.1.49.
To be read in conjunction with K1002.

SECURITY

Specification

Valve

~~REDACTED~~
UNCLASSIFIED

UNCLASSIFIED

→ Indicates a change

FREQUENCY RANGE

The crystal valve is intended
to operate within a frequency
range -

12,000 - 6,000 Mc/s.
(2.5 - 5.0 cms.)

MARKING

Crystal Valves

A green spot or CV111

PACKING

See K.1005

DIMENSIONS

See K.1002/A1

	K1002 para. ref.	Test	Limits	No. Tested	Note
a	6.2	Back to forward resistance ratio.	10 : 1 Min.	100%	1
b	6.3	Forward resistance (Ω)	250 max.	100%	1
c	6.4.1	Resistance to Voltage Breakdown V = 1.4V., T = 5 mins.		100%	2
d		Crystal shall be subjected to 3,000 pulses of duration $2\frac{1}{2} \times 10^{-9}$ secs. in an approved D.C. "spike" pulse tester at an energy level of 0.1 ergs.		100%	2
e	6.4.3	Test 'a' and 'b' repeated	See tests 'a' and 'b' above	100%	
f	6.5	Noise factor	At some point in the frequency range 10,700 Mc/s - 8,600 Mc/s (2.8-3.5 cms.) Max. predicted N.F. 14 db. S.P.G.	100%	

NOTES

- 1: This figure applies only to the factory test. Subsequently the back to forward resistance ratio may fall and the forward resistance rise, when crystal valves within the following limits may be regarded as satisfactory for operational use:
(a) Back to forward resistance ratio (min.) 8 : 1
(b) Forward resistance (max.) - - - - - 265 Ω
- 2: Test 'd' may be carried out as a burn out test alternatively to test 'c'.
- 3: Tests 'a' and 'b' and 'f' are repeatable.
Tests 'c' and 'd' are non-repeatable.