

Specification MAP/CV241/Issue 4 Dated 19.1.49 To be read in conjunction with K.1002.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

FREQUENCY RANGE	MARKING
<p>The crystal valve is intended to operate as a detector in wavemeters and other similar applications below 1000 Mc/s. or, for less accurate measurements, between 6000 Mc/s. and 1000 Mc/s.</p>	<p><u>Crystal Valves</u>                      A yellow and a blue spot or CV.241.</p> <p><u>Envelopes</u>                      CV241, 3 in No.</p> <p><u>BOX</u>                      Crystal Valves Type                      CV.241 ..... in No.</p> <p><u>Packing</u>                      To be tropical Proof.                      See K.1005</p>

	K1002 para. ref.	Test	Limits		No. Tested	Note
			Min.	Max.		
a	6.2	Back to forward resistance ratio	10:1	-	100%	A
b	6.3	Forward resistance ( $\Omega$ )	-	250	100%	A
c	6.4.1	Resistance to Voltage Breakdown V = 1.4V, T = 5 mins.			100%	
d	6.4.3	Test 'a' and 'b' repeated.	See tests 'a' and 'b' above		100%	
e	6.5	Predicted Noise Factor (db.SPY). At some point in the frequency range 2700 - 3360 Mc/s (11-9cms).	14	16	100%	
f	6.5.2	Rectified Current ( $\mu$ A) Test Frequency = 100 Mc/s.	170	-	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 the 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  $\Omega$

2: Tests (a), (b), (e) and (f) are repeatable.  
Test (c) is non-repeatable.