

VALVE ELECTRONIC CV 364ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

Specification AD/CV364 Issue No.5 dated 10/11/55 To be read in conjunction with K1001	<table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <th><u>Specification</u></th><th><u>Valve</u></th></tr> <tr> <td>Unclassified</td><td>Unclassified</td></tr> </table>	<u>SECURITY</u>		<u>Specification</u>	<u>Valve</u>	Unclassified	Unclassified
<u>SECURITY</u>							
<u>Specification</u>	<u>Valve</u>						
Unclassified	Unclassified						

→ Indicates a change

<u>TYPE OF VALVE:-</u> Mixer Crystal Valve (Silicon)			<u>MARKING</u> CV364	
<u>ENVELOPE:-</u> Cartridge, Unshielded				
<u>RATINGS</u>			<u>DIMENSIONS</u> K1001/A.1/D8	
			<u>Note</u>	
Max. Frequency of Operation	(Mc/s)	6000		
Min. Back to Forward resistance ratio.		8:1		
Max. Forward Resistance.	(Ohms)	265	A	
Max. amount by which performance is below "Standard best"	(dB)	1.5		
Max. Noise temperature ratio		1.65		
Nominal I.F. Impedance	(Ohms)	350		
<u>NOTE</u>				
A. In an ohmmeter type of measurement using 1.5V source with series resistance of 500 ohms and a 3 mA, F.S.D. meter.				

TESTS

To be performed in addition to those applicable in K1001

	Test conditions	Test	Limits		No. Tested	Note
			Min.	Max.		
→ (a)	The crystal shall be subjected to 3000 pulse discharges in the conducting direction, (spaced at least 200 μ secs. apart) from a 20 pF condenser at an energy level of 0.6 ergs	<u>Resistance to Burn-out</u> The crystal shall subsequently pass tests (b) and (c)	-	-	100%	
(b)	The overall performance shall be measured in the standard test equipment Pattern 65682X "Performance Meter for Crystal Valves".	<u>Performance Measurement</u> dB's below "Standard best"	-	1.5	100%	1
→ (c)	The rectified current to be measured in Pattern 65682X "Performance Meter" switched to "Manual" operation	<u>Rectified Current</u> (μ A)	400	-	100%	2

NOTES

- 1. A.S.R.E. will calibrate standard crystals relative to the "Standard best" crystal. Sub-standard crystals should be chosen by the manufacturer for routine checks.
- 2. A standard crystal is used in this test which is a different standard to that used in test (b). The local oscillator power level of the Performance Meter, Pattern 65682X shall be set to give 400 μ A crystal current with this standard crystal inserted. This power level shall be kept constant. All crystals which pass less than 400 μ A when the Performance Meter is tuned to give maximum performance reading shall be rejected.