

ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

Specification AD/CV2341 Issue No. 1 Dated : 21.1.55 To be read in conjunction with K1001	<u>SECURITY</u> Specification Valve Unclassified Unclassified
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<u>TYPE OF VALVE:-</u> Coaxial Noise Diode for frequencies up to 1000 Mc/s. <u>CATHODE:-</u> Directly heated tungsten. <u>ENVELOPE:-</u> Metal and glass. <u>PROTOTYPE:-</u> VX3138	<u>MARKING</u> See K1001/4																											
<table border="1"> <thead> <tr> <th colspan="2"><u>RATING</u></th> <th><u>Note</u></th> </tr> </thead> <tbody> <tr> <td>Max. Filament Voltage (V)</td> <td>5.0</td> <td>A, B</td> </tr> <tr> <td>Max. Filament Current (A)</td> <td>4.0</td> <td>A, B</td> </tr> <tr> <td>Max. Saturated Anode Current (mA)</td> <td>200</td> <td>A, C</td> </tr> <tr> <td>Anode Voltage for saturation at all Anode Currents (V)</td> <td>200</td> <td>C, D</td> </tr> <tr> <td>Max. Anode Voltage (V)</td> <td>400</td> <td>A</td> </tr> <tr> <td>Max. Anode Dissipation without Forced Air Cooling (W)</td> <td>10</td> <td>A</td> </tr> <tr> <td>Max. Anode Dissipation with Forced Air Cooling (W)</td> <td>40</td> <td>A, E</td> </tr> <tr> <td>Characteristic Impedance (approx.) (Ω)</td> <td>70</td> <td></td> </tr> </tbody> </table>	<u>RATING</u>		<u>Note</u>	Max. Filament Voltage (V)	5.0	A, B	Max. Filament Current (A)	4.0	A, B	Max. Saturated Anode Current (mA)	200	A, C	Anode Voltage for saturation at all Anode Currents (V)	200	C, D	Max. Anode Voltage (V)	400	A	Max. Anode Dissipation without Forced Air Cooling (W)	10	A	Max. Anode Dissipation with Forced Air Cooling (W)	40	A, E	Characteristic Impedance (approx.) (Ω)	70		<u>DIMENSIONS</u> See drawing, Page 3
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<p>A. Absolute Maximum Value.</p> <p>B. Emission (of the order of a milliampere) may be expected to commence at 2.0 Volts and 2.4 Amps.</p> <p>C. The value of the saturated Anode Current is regulated by variation of the filament voltage.</p> <p>D. The estimated life at 200 mA Anode Current is 30 hours. At 20 mA Anode Current it is 1000 hours.</p> <p>E. For anode dissipations over 10W an air flow of at least 2.5 cubic feet per minute between the fins is required.</p>																												

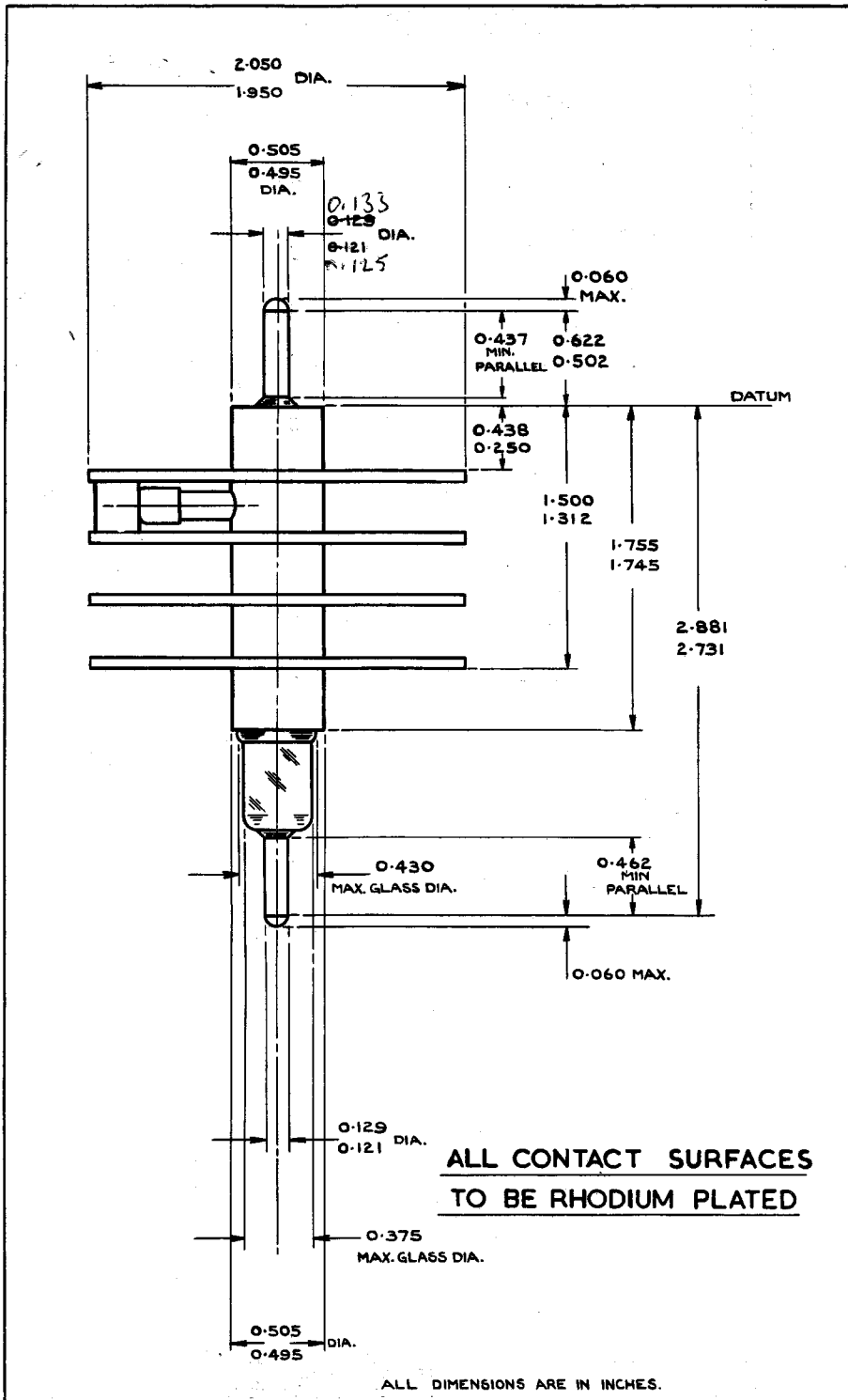
TESTS

To be performed in addition to those applicable in K1001

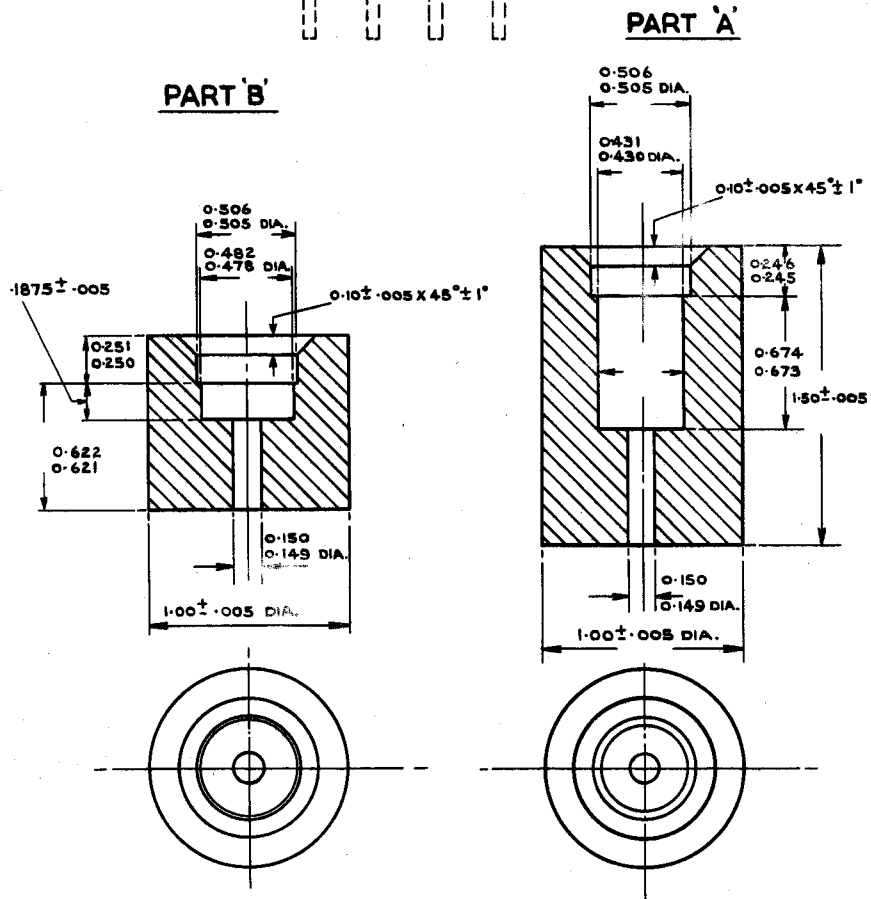
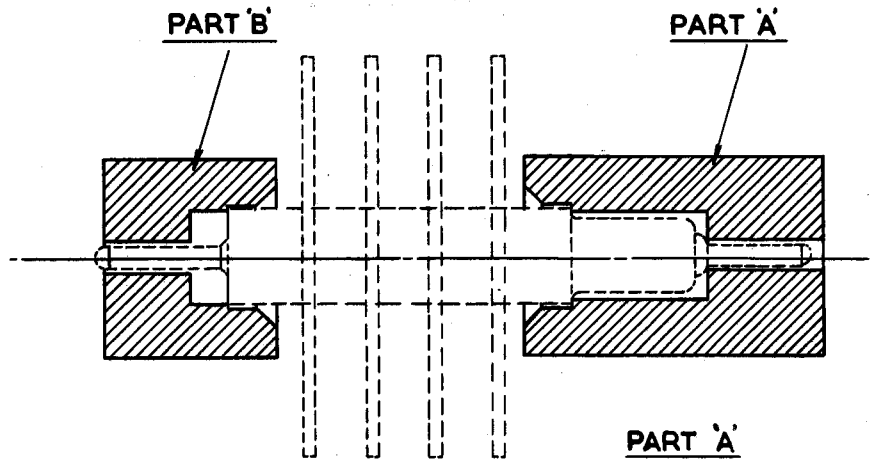
	Test Conditions			Test	Limits		No. Tested
	Vf (V)	Va (V)	Ia (mA)		Min.	Max.	
a	3.0	-	-	If (A)	2.6	3.2	100%
b	-	200	15	If (A)	2.85	3.15	100%
c	-	200	200	If (A)	3.6	4.0	100%

NOTE

The insertion of the valve in a correctly terminated 70 Ω coaxial line shall not result in a V.S.W.R. less than 0.9 at 280 Mc/s. This is a Type Approval Test.

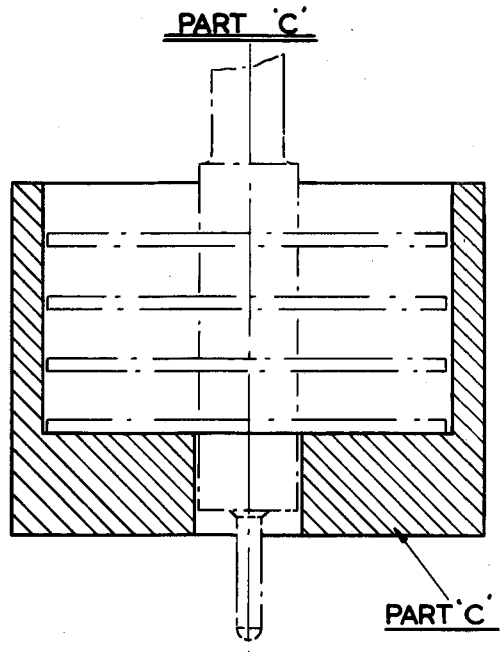
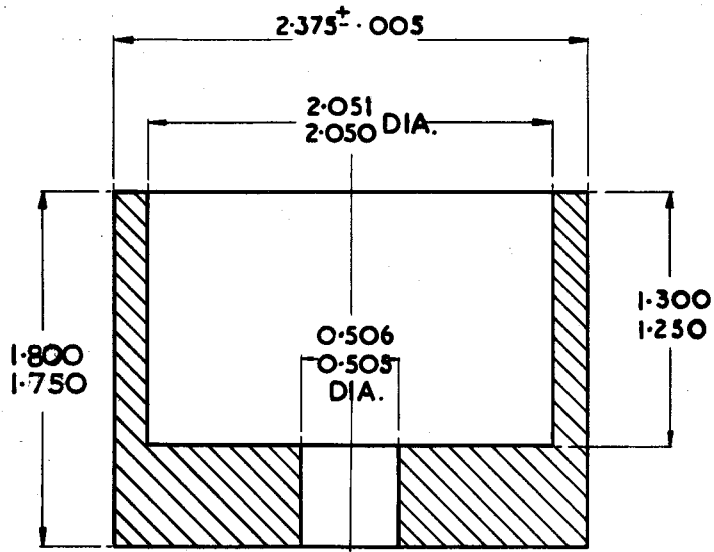


CONCENTRICITY GAUGES.



ALL DIMENSIONS ARE IN INCHES

SHOWING METHOD OF USING GAUGES.



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