

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

CV58

Specification AD/CV58 Issue 7 dated 10/10/58 To be read in conjunction with K1001 ignoring clauses:- 5.2, 5.8.			<u>SECURITY</u> <u>Specification</u> <u>Valve</u> Unclassified Unclassified	
—————→ Indicates a change				
<u>TYPE OF VALVE:-</u> Diode of "axial" type for use down to 9 cms.			<u>MARKING</u> See K1001/4	
<u>CATHODE:-</u> Indirectly heated.			<u>BASE</u> Concentric fitting, consisting of cathode tube and filament pin, for use with co-axial line. Anode connection to pin at other end of valve. See page 3.	
<u>ENVELOPE:-</u> Glass - clear				
<u>PROTOTYPE:-</u> E1273				
<u>RATING</u>		Notes	<u>DIMENSIONS</u> See Page 3.	
Heater Voltage (V)	6.3	A		
Heater Current (A)	0.36			
Minimum Conductance (mA/V)	1.4	B		
<u>NOTES</u>				
A. Within limits + 0.2, - 0.4 V. The anode-cathode clearance varies with cathode temperature, and these limits should not be exceeded in operation or some fall in performance as a mixer will result.				
B. At $I_a = 1 \text{ mA}$				

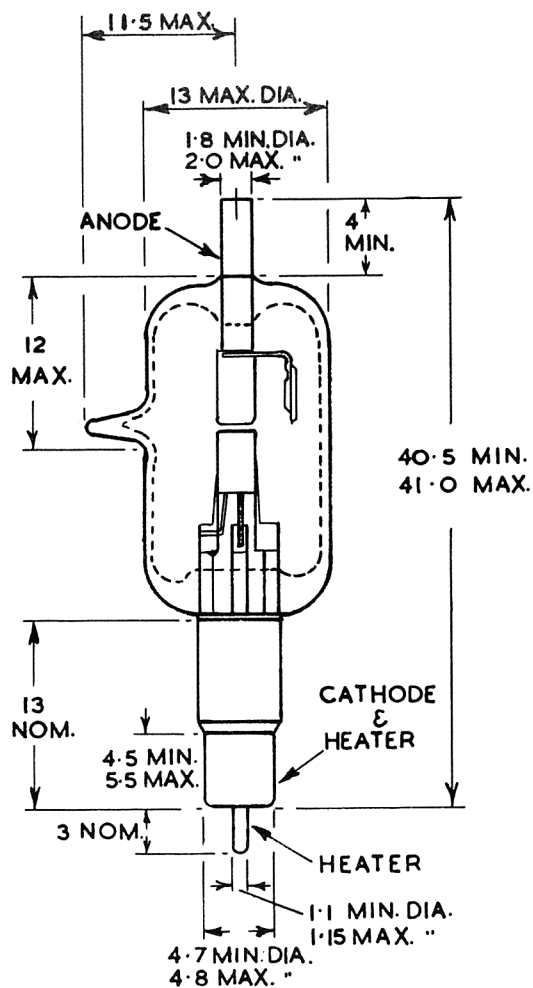
TESTS

To be performed in addition to those applicable in K1001

	Test	Test Conditions	AQL	Insp. Level	Symbol	Limits		Units
						Min.	Max.	
a	Heater Current	$V_h = 6.3V$		100%	I_h	0.335	0.385	A
b	Conductance	$V_h = 6.3V$ $I_a = 1.0 \text{ mA}$ Note 1		100%	gm	1.4	-	mA/V
c	Capacitance	$V_h = 6.3V$ Note 2	6.5	IB	$C_a - k + h$	-	2.5	μFd ←
d	Leakage Conductance	$V_h = 6.3V$	6.5	IB	-	-	4	μmhos ←

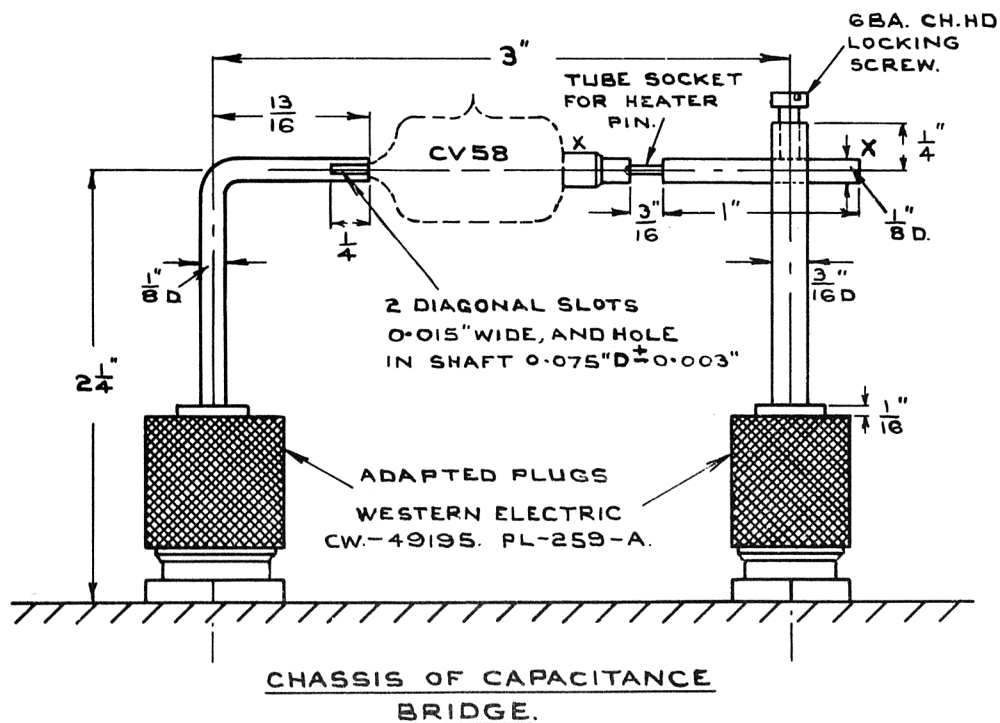
NOTES

1. To be measured with V_a (D.C.) adjusted for 1.0 mA, and then varied $\pm 0.1V$.
2. The Heater Voltage supply to be D.C. Capacitance and Leakage Conductance are to be measured on a standard R.F. Capacitance Bridge, using a jig such as is shown on page 4.
3. The above tests are designed to ensure satisfactory operation at a wavelength of 10 cms. ←



ALL DIMENSIONS IN MILLIMETRES

MOUNT FOR CV58 FOR PURPOSE
OF CAPACITANCE AND LEAKAGE
CONDUCTANCE MEASUREMENTS.
MATERIAL - BRASS.



NOTE. D.C. HEATER VOLTAGE TO BE APPLIED BY CLIPPING FLEXIBLE LEADS ON TO POINTS XX.