VALVE ELECTRONIC

CV3797

ADMIRALTY SIGNAL & RADAR ESTABLISHMENT

Specification AD/CV3797/Issue No. 1. Dated : 29.9.51. To be read in conjunction with K1004.	SECURITY Specification: Unclassified Valve: Unclassified

TYPE OF VALVE:- Split Cathode Single Anode Vacuum Photo Electric Cell.

CATHODE:- Caesium treated silver oxide.

ENVELOPE:- Glass.

PROTOTYPE:- V.944A.

RATING			Note
Min. Sensitivity	(μA/lumen)	10	A,B
Working Voltage	(V)	25 - 150	D
Max. Anode Voltage	(V)	250	C
Max. Cathode Current (each cathode)	(μA)	12	

MARKING

See K1001/4.

BASE

Mazda Octal

Pin	Electrode
1	Bottom Cathode
2	No Connection
3	No Connection
4	Anode
5	No Connection
6	No Connection
7	No Connection
8	Top Cathode

DIMENSIONS

See Page 3.

PACKAGING

See K1005.

NOTES

A. Measured with Va = 25 volts, colour temperature of source = 2848°K and diameter of projected circle of illumination = 14 mm.

B. The spectral sensitivity shall correspond to the normal published characteristics of a caesium on silver cathode.

C. The maximum voltage is considered to be the voltage which will never be exceeded at any time when the cell is illuminated. It is NOT to be marked on the cell.

D. The working voltage is to be clearly and permanently marked on each cell.

TESTS

To be performed in addition to those applicable In K1004.

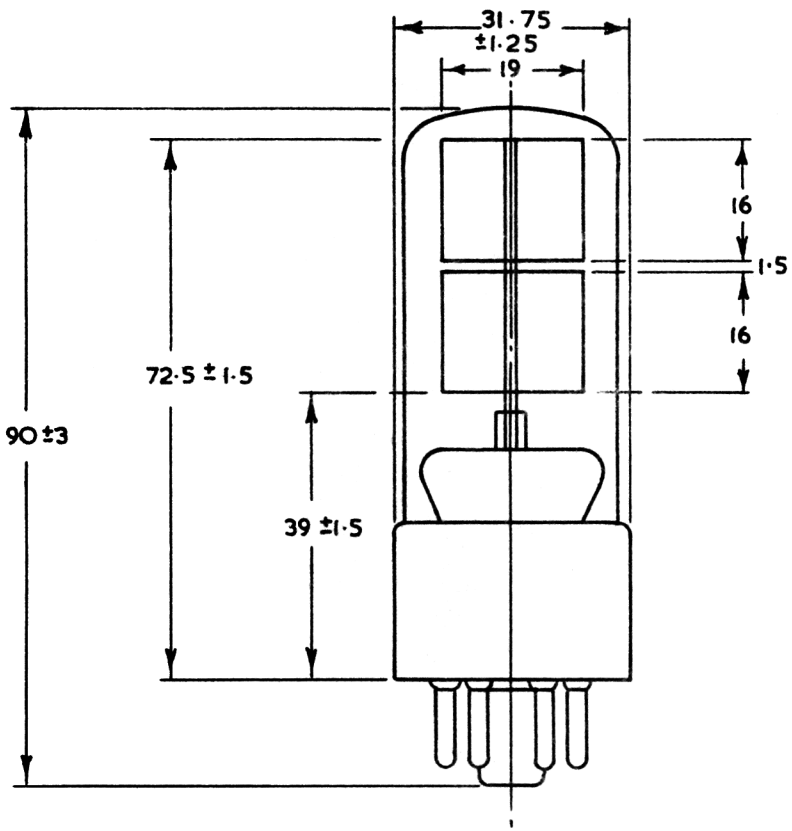
	Test Conditions	Test	Limits		No. Tested	Note
			Min.	Max.		
a	Test each half of cell Va = 25 V	Relative Sensitivity (μA/L)	The sensitivity of the weaker cell shall not be less than 75% of the other.		100%	1,2
b	Va = 25 V	Sensitivity (μA/L) Test each cathode separately.	10.0	-	100%	1,2
c	Va = 90 V Cell shielded from all sources of light.	Ia (μA) Test each cathode separately.	-	0.1	100%	2
d	Sensitivity with Va = 90 Sensitivity with Va = 25	Vacuum Test (Ratio)	-	1.3	100%	1,2

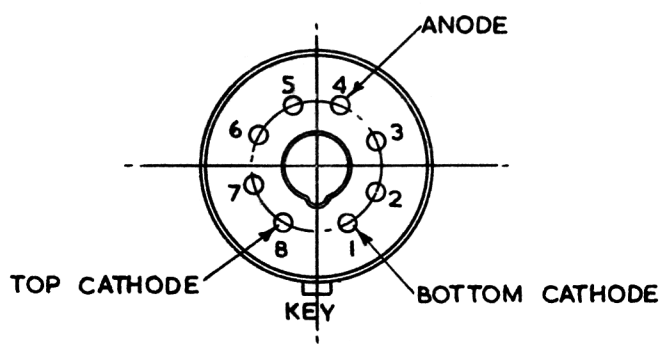
NOTES

1. With colour temperature 2848°K. Diameter of projected circle of illumination 14 m/m.

2. All the above tests will be carried out with a load resistance of not less than 0.1 MΩ in the anode circuit.

CV3797





ALL DIMENSIONS IN MILLIMETRES.