

MINISTRY OF SUPPLY - D.L.R.D.(A)/R.A.E.

Specification MOSA/CV337 Issue 5 Dated 9.7.57. To be read in conjunction with K.1001	<div style="text-align: center;"><u>SECURITY</u></div> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"><u>Specification</u> UNCLASSIFIED</div> <div style="text-align: center;"><u>Valve</u> UNCLASSIFIED</div> </div>
--	--

—————→ Indicates a change

TYPE OF VALVE - Electron Multiplier Photocell ENVELOPE - Glass PROTOTYPE - VX.6046		<div style="text-align: center;"><u>MARKING</u></div> See K.1001/4.1.	
<div style="text-align: center;"><u>RATINGS</u></div>		<div style="text-align: center;"><u>BASE</u></div> Small Shell Submagnal 11 pin	
<div style="display: flex; justify-content: space-between;"> <div> Max. H.T. Supply Max. Voltage between Anode and Dynode No. 9 Max. Anode Current Max. Ambient Temperature Max. Anode Dissipation </div> <div> (V) (V) (mA) (°C) (W) </div> <div> 1100 250 2.5 70 0.5 </div> </div>		<div style="text-align: center;"><u>CONNECTIONS</u></div> <div style="display: flex;"> <div style="flex: 1;"> <div style="text-align: center;">Pin</div> <div>1 2 3 4 5 6 7 8 9 10 11</div> </div> <div style="flex: 2;"> <div style="text-align: center;">Electrode</div> <div>Dynode No. 1 Dynode No. 2 Dynode No. 3 Dynode No. 4 Dynode No. 5 Dynode No. 6 Dynode No. 7 Dynode No. 8 Dynode No. 9 Anode Cathode</div> </div> </div>	
		<div style="text-align: center;"><u>DIMENSIONS</u></div> See Drawing Page 3.	

NOTES

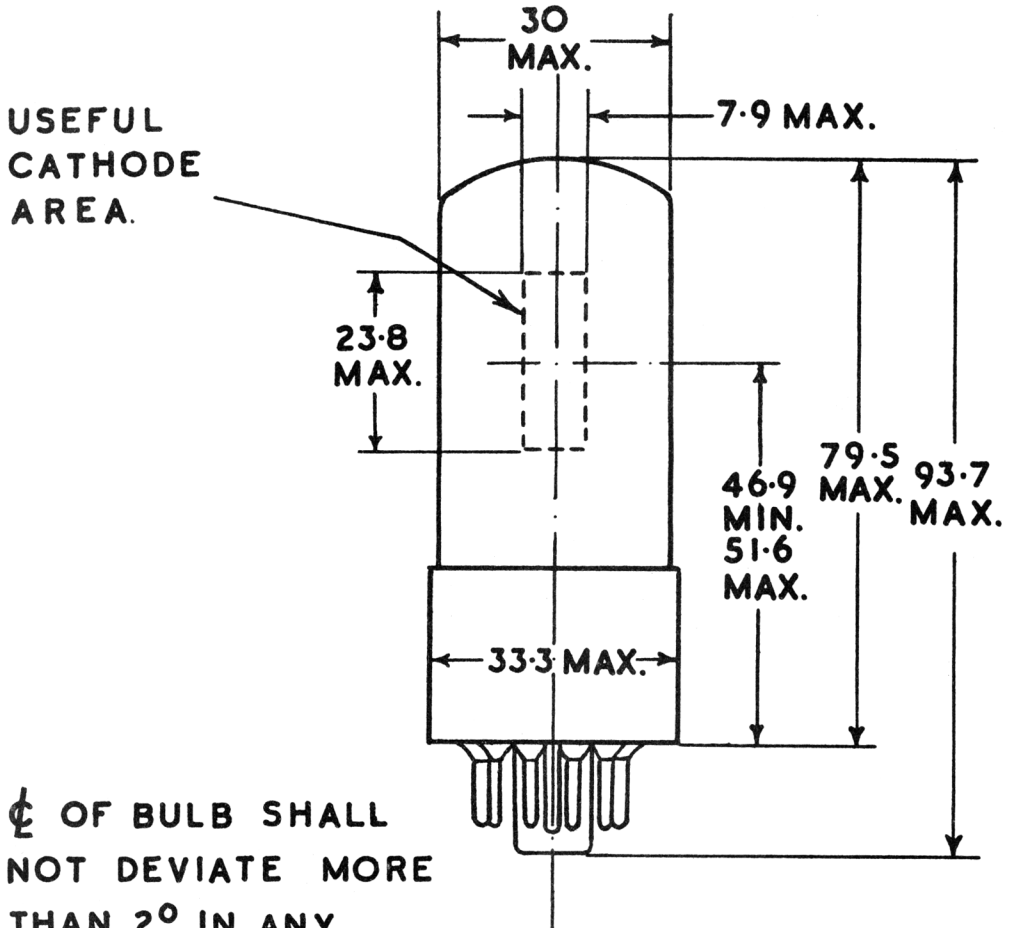
- A. An anode load resistance of at least 10,000 ohms is recommended for a protective resistance.
- B. The spectral response is blue sensitive.

To be performed in addition to those applicable in K.1001.

Test Conditions				Test	Limits		No. Tested	Note
					Min.	Max.		
a				<u>CAPACITANCES (pF)</u> 1. Anode to Dynode 9 2. Anode to Rest	2.0 3.5	6.0 9.5	6 per week	
b	V _{ht} (kV)	V _{a-dy 9} (V)	Light Flux Lumens	Sensitivity (μ A/Lumen)	7.5	-	100%	2
	100V between cathode and all other pins tied together.		0.1					
c	1.0 through 10K ohms	100	0	<u>Dark Currents</u> 1. I _c (μ A) 2. I _a (μ A)	- -	5.0 0.25	100% 100%	
d	1.0 through 10K ohms	100	2.5×10^{-5}	I _a (μ A)	112.5	-	100%	2,3
e	1.0 through 10K ohms	100	2.5×10^{-5}	μ	75,000	-	100%	4

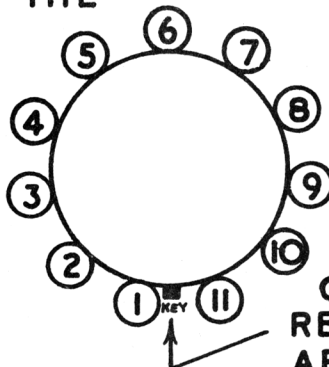
NOTES

1. The voltage steps from cathode to dynode No. 1 and from each dynode to the next in sequence shall be equal.
2. The light flux shall be incident on an aperture 20 mm x 5 mm centred on the centre of the cathode.
3. The tube position shall be adjusted to give maximum sensitivity.
4. μ in this test is the ratio of overall sensitivity (deduced from clause d) to primary sensitivity (measured in clause b).



CL OF BULB SHALL NOT DEVIATE MORE THAN 2° IN ANY DIRECTION FROM THE PERPENDICULAR ERECTED AT CENTRE OF BOTTOM OF BASE.

ALL DIMENSIONS IN MILLIMETRES.



DIRECTION OF LIGHT WITH RESPECT TO PIN ARRANGEMENT.

ELECTRONIC VALVE SPECIFICATIONS
SPECIFICATION CV337 ISSUE 5 DATED 9.7.57
AMENDMENT NO. 1

Page 2 Amend the specified test clauses as follows:-

Test clause "b" Amend the Minimum Limit to read
8.2. $\mu\text{A}/\text{Lumen}$ in place of 7.5 $\mu\text{A}/\text{Lumen}$.

Test clauses 'd' and 'e' In column headed Light,
Flux, Lumens Amend 2.5 x 10^{-5} to read 1.0 x 10^{-5}

Test clause 'd' Amend the Minimum Limit of
112.5 to read 49.5 μA

April, 1961.
N.56730/D

The Director,
Royal Aircraft Establishment