

DU MONT

MULTIPLIER PHOTOTUBE

TYPE 6365

The Du Mont Type 6365 is a 6-stage multiplier phototube with a flat end-window type photocathode having a S-11 spectral response. The average photocathode luminous sensitivity is 50 microamperes per lumen. The diameter of this tube is 3/4 of an inch. Because of its small size, it is ideal for applications where space is at a premium but where operational requirements are exacting. The focusing shield has been connected internally for the optimum photoelectron collection.

GENERAL CHARACTERISTICS

Electrical Data

	<u>Avg.</u>	
Spectral response	S11	
Cathode sensitivity at 210 volts, 0 cycles between cathode and all other electrodes	50	uA/lumen
Cathode radiant sensitivity at maximum response at 210 volts between cathode and all other electrodes	0.056	uA/cm ²
Wavelength at maximum response	4,000 ± 500	Angstroms
Anode sensitivity at 150 volts/stage, 0 cycles (Note 1)	150	ma/lumen
Current amplification at 150 volts/stage (Note 1)	3000	
Anode dark current, at 150 volts/stage (25°C)	1.0	uA

Mechanical Data

Window dimension, minimum	1/2	In. Dia.
Seated height	2 3/16 ± 1/16	In.
Tube diameter	3/4 ± 1/16	In.
Overall length, maximum	2 3/4	In.
Base type	DuMont 9 Pin miniature	
Mounting position	Any	
Window index of refraction	1.5	

MAXIMUM RATINGS

Peak cathode current (Note 2)	10	uA
Average anode current (Note 3)	1	ma
Peak anode current	5	ma
Average anode dissipation (Note 3)	0.5	W
Peak anode dissipation	2.0	W
Supply voltage between anode and cathode (DC or peak AC)	1300	Volts
Supply voltage between last dynode and anode (DC or peak AC)	150	Volts
Supply voltage between cathode and 1st dynode (DC or peak AC)	300	Volts
Ambient Temperature	75	°C



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NOTES

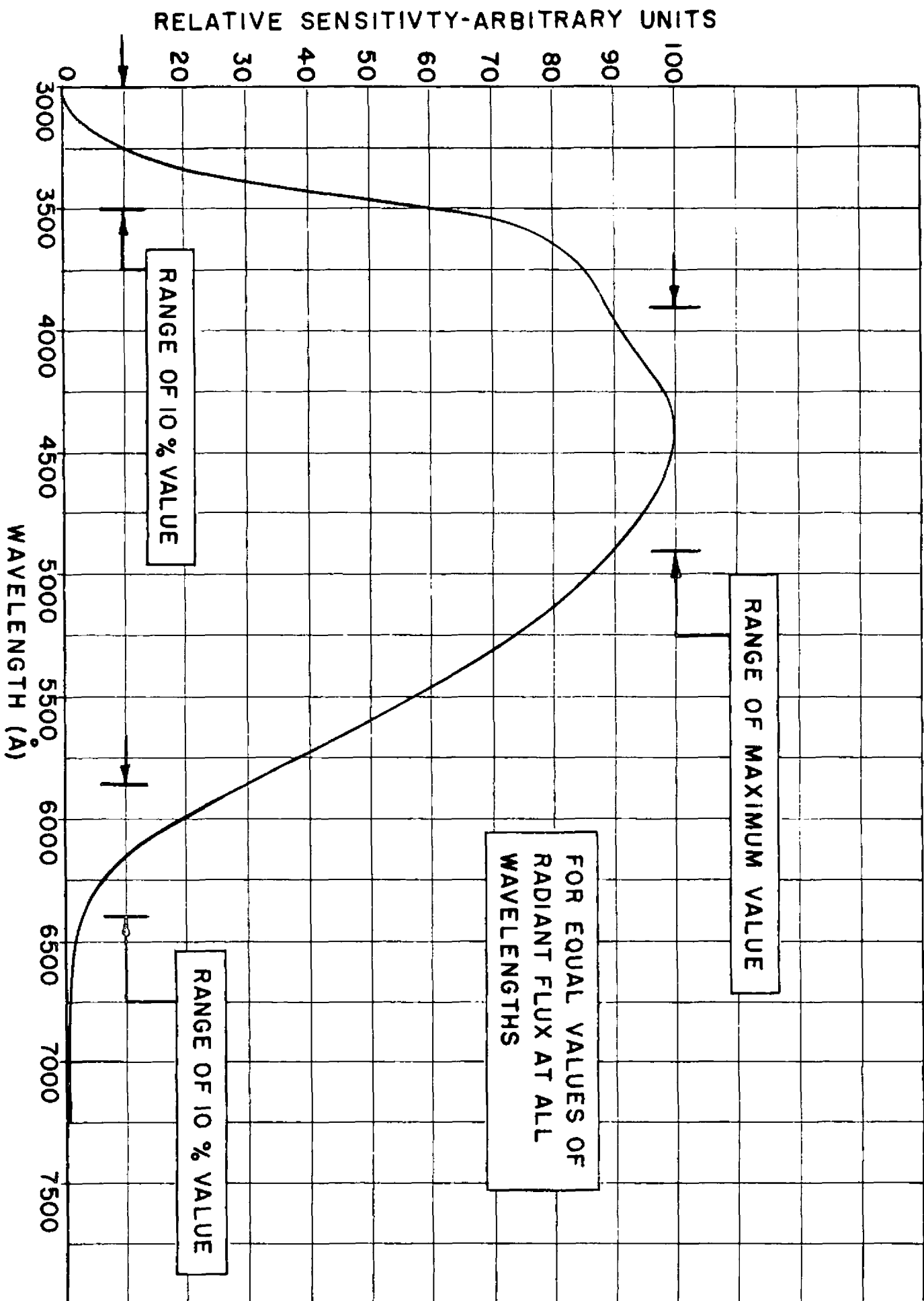
1. $V_{pc-D_1} = 300$ volts.
2. The cathode current given here is that current at which the response of the cathode current ceases to be a linear function of the light intensity because of cathode resistance. In general, the cathode current must be kept well below this value in order to satisfy the maximum ratings on the anode current.
3. Averaged over a 30 second interval maximum.

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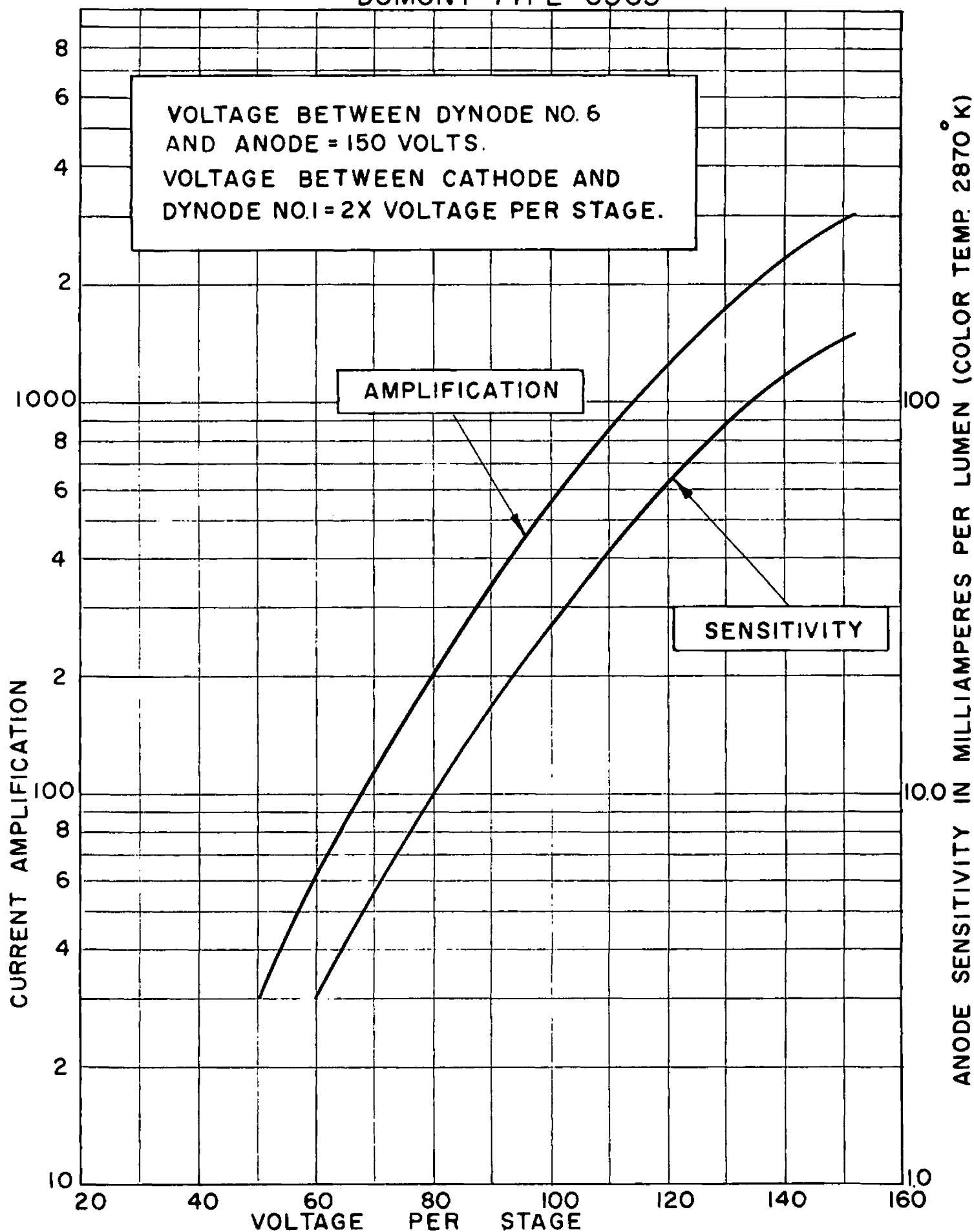
Allen B. Du Mont Laboratories, Inc.
Passaic, New Jersey

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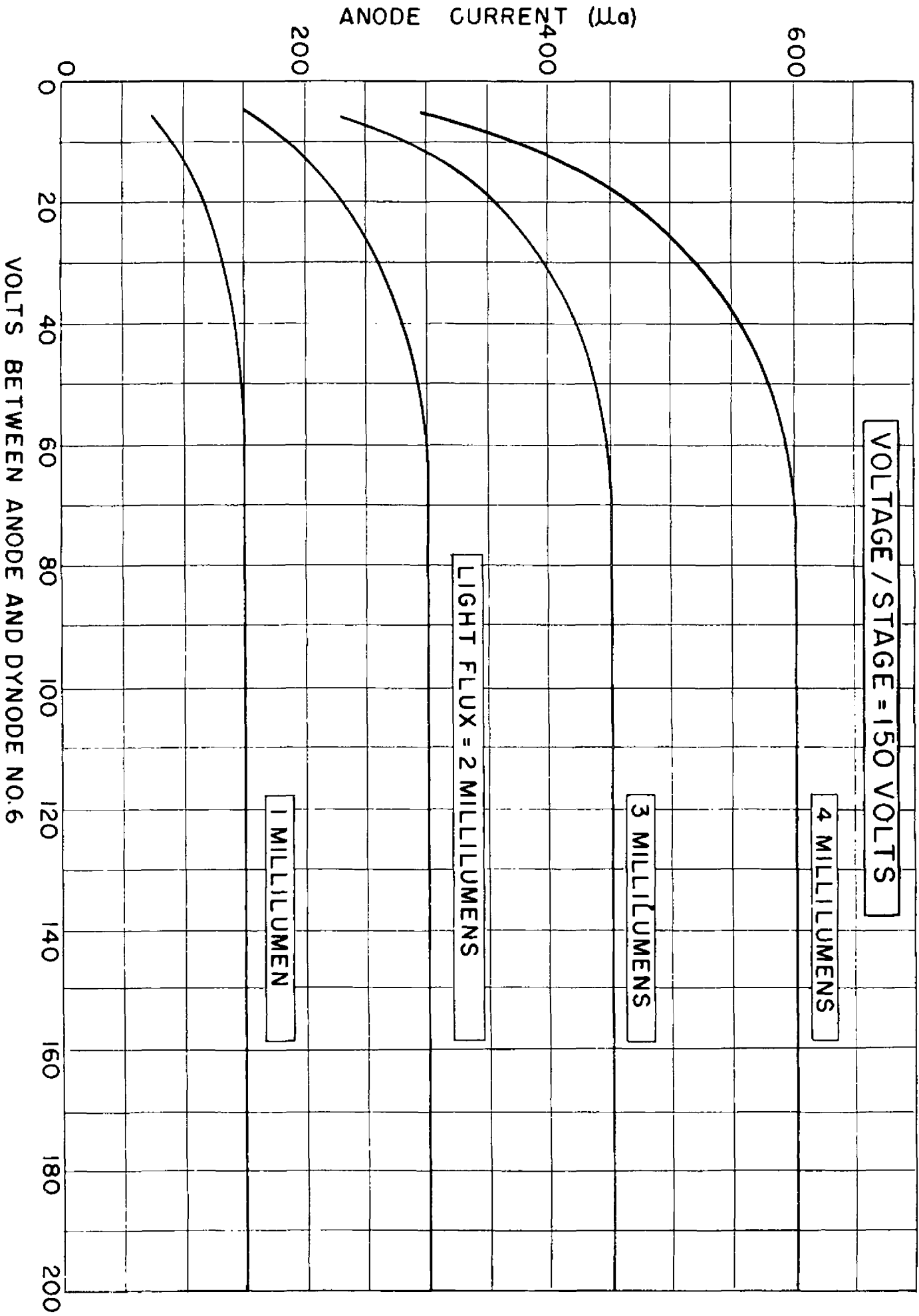
SPECTRAL SENSITIVITY CHARACTERISTICS OF S-11 RESPONSE



AVERAGE MULTIPLIER CHARACTERISTICS DUMONT TYPE 6365



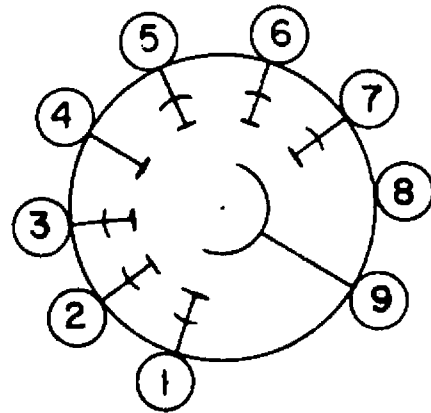
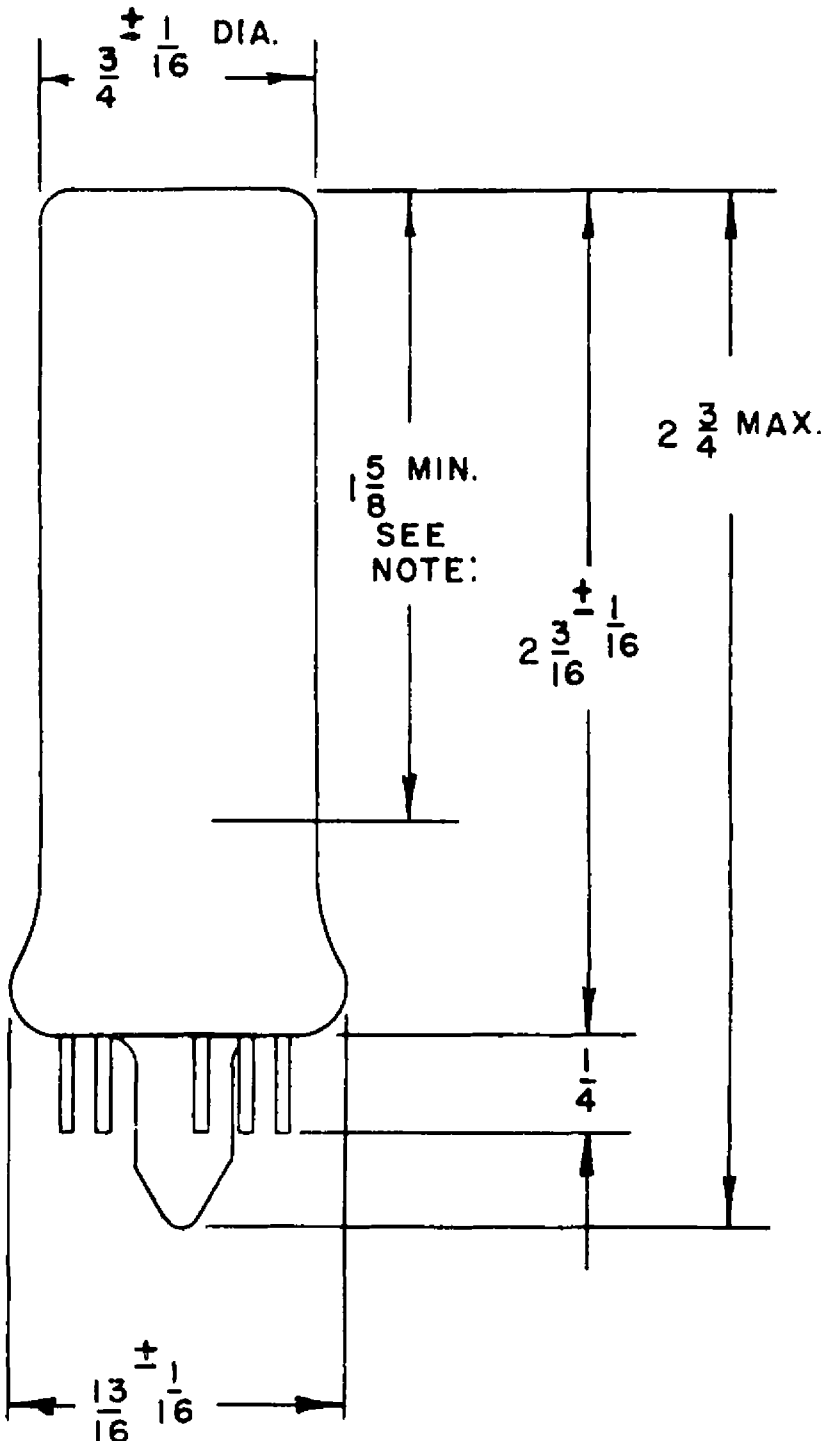
AVERAGE ANODE CHARACTERISTIC FOR DUMONT TYPE 6365



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9 PIN MINIATURE STEM



BOTTOM VIEW

<u>PIN NO.</u>	<u>ELEMENT</u>
1	DYNODE NO. 1
2	DYNODE NO. 3
3	DYNODE NO. 5
4	ANODE
5	DYNODE NO. 6
6	DYNODE NO. 4
7	DYNODE NO. 2
8	INTERNAL CONNECTION
9	CATHODE

NOTE: DIRECTION OF LIGHT
INTO END OF BULB.

NOTE: THIS DIMENSION DENOTES THE MINIMUM
DISTANCE FROM THE FACE PLATE OVER
WHICH THE FACE PLATE DIMENSION
HOLDS.