

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/mW |
| 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 |

DUMONT

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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.

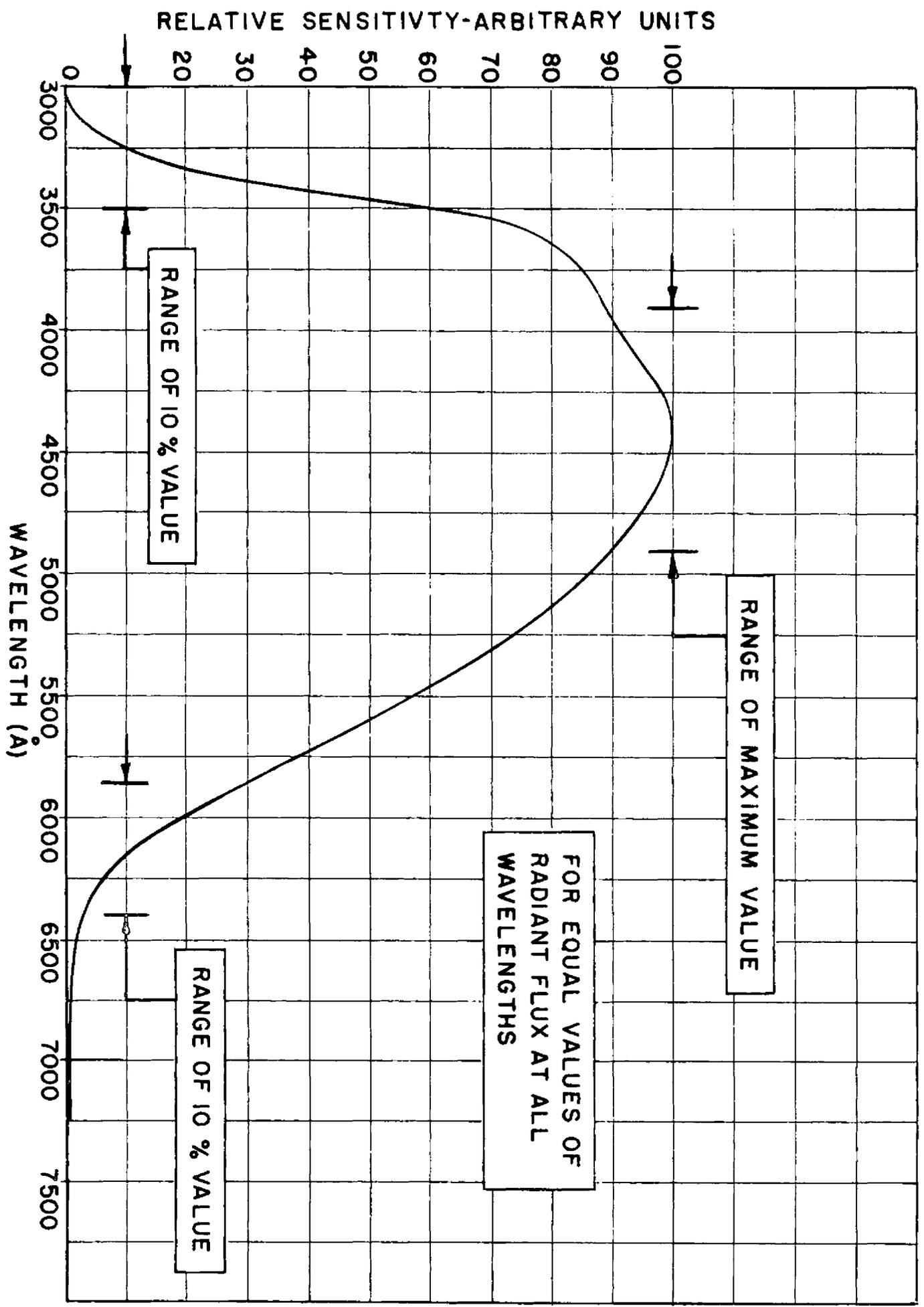
GP/AL NEW

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

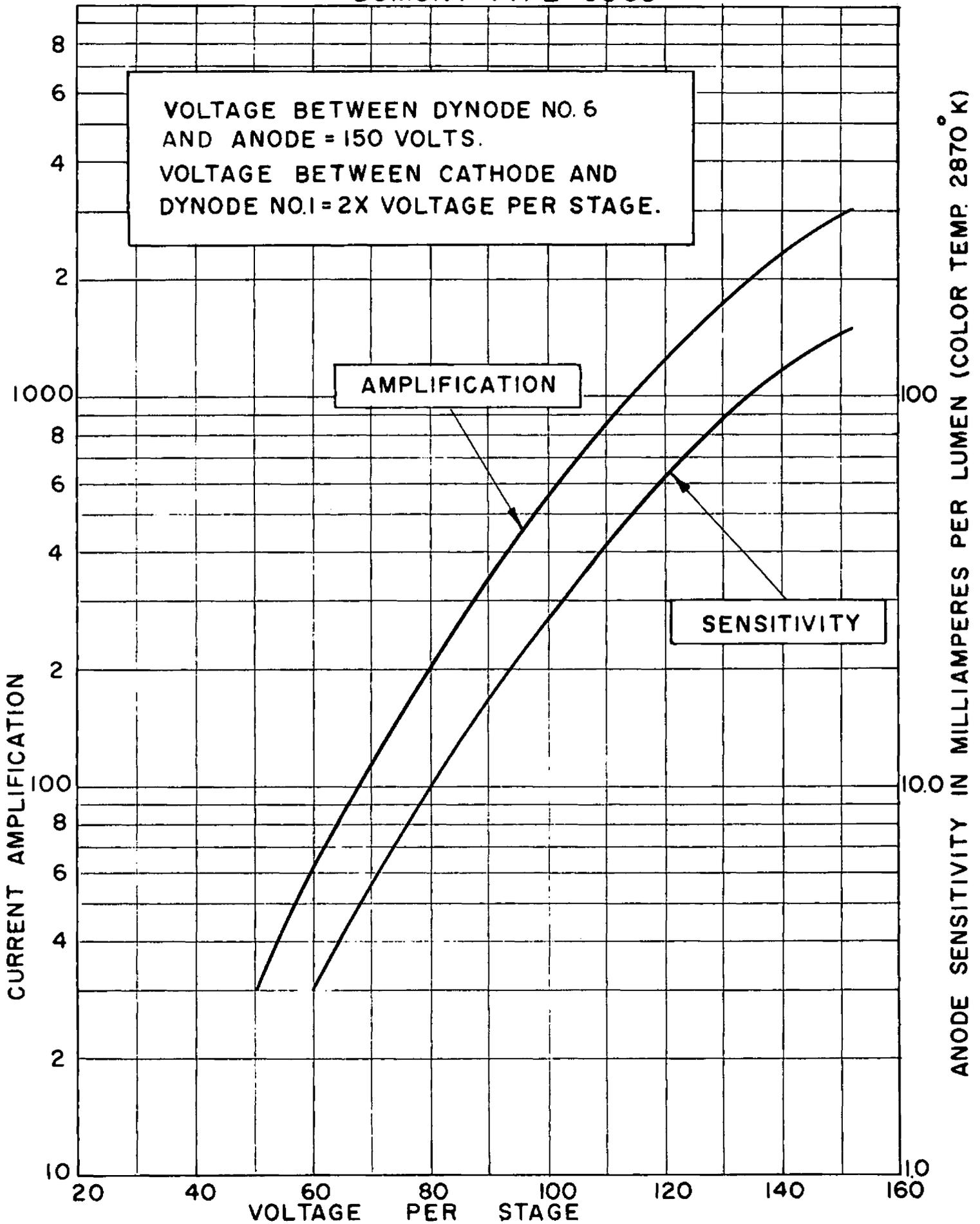
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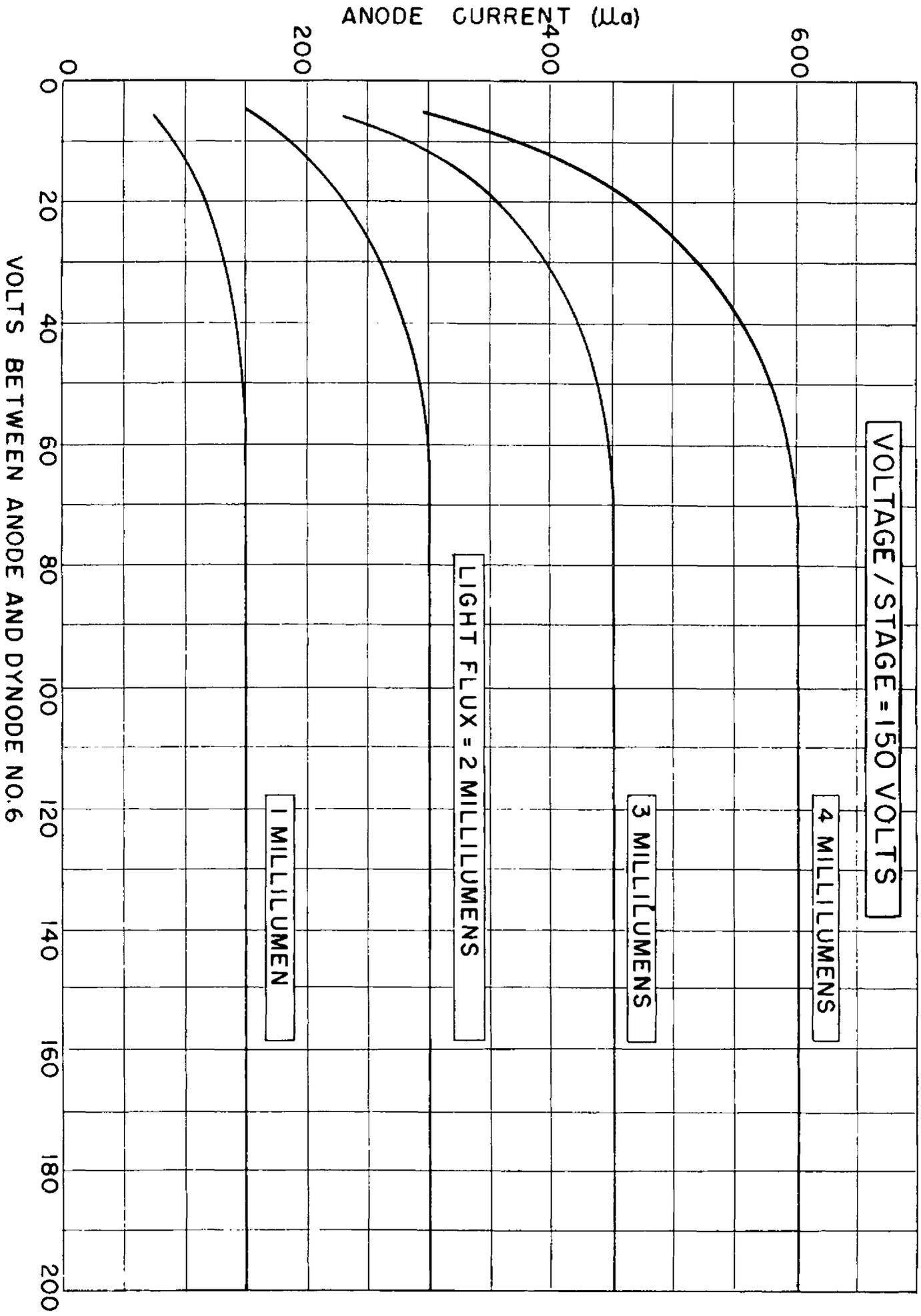
SPECTRAL SENSITIVITY CHARACTERISTICS OF S-11 RESPONSE



AVERAGE MULTIPLIER CHARACTERISTICS DUMONT TYPE 6365



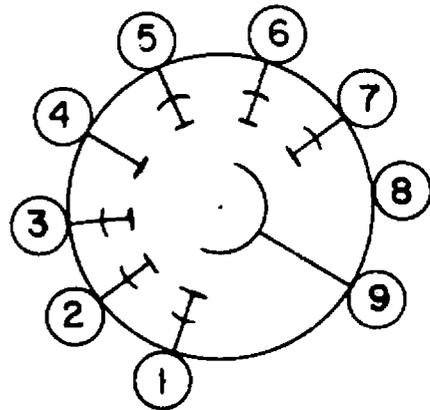
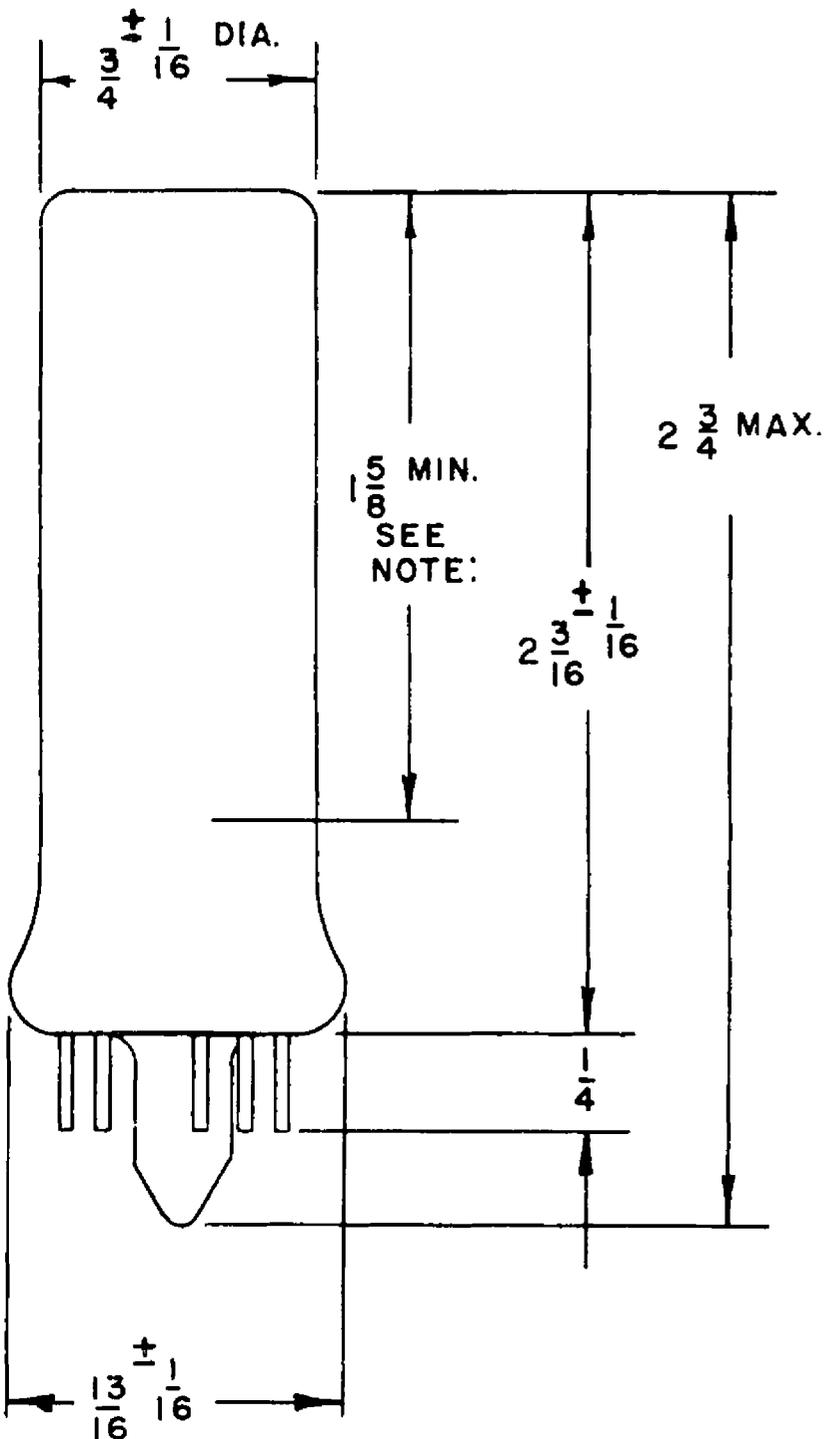
AVERAGE ANODE CHARACTERISTIC FOR DUMONT TYPE 6365



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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.