MULTIPLIER PHOTOTUBE TYPE 7909

The type 7909 is a 3/4" diameter 10-stage multiplier phototube having a flat end-window photocathode with an S-11 spectral response. This type incorporates an integral, potted voltage-divider resistor network to achieve maximum compactness of associated equipment.

ELECTRICAL:	Min.	Avg.	Max.	
Spectral Response	--	S11	--	
Cathode Luminous Sensitivity with 200 Volts, d-c Between Cathode and All Other Electrodes	30	--	--	μA/Lumen
Anode Luminous Sensitivity with 105 Volts d-c/Stage	3	--	--	A/Lumen
Cathode Radiant Sensitivity at 0.44 Microns with 200 Volts Between Cathode and All Other Electrodes	--	0.045	--	μA/μWatt
Anode Dark Current with 105 Volts/Stage (25° C)	--	--	0.05	μAmpere
Current Amplification with 105 Volts/Stage	--	150,000	--	
Wavelength at Maximum Response	3900	4400	4900	Angstroms
Wavelength at 10% of Maximum Response on long Wavelength Side	5850	6125	6400	Angstroms
Wavelength at 10% of Maximum Response on short Wavelength Side	3000	3250	3500	Angstroms

MECHANICAL:

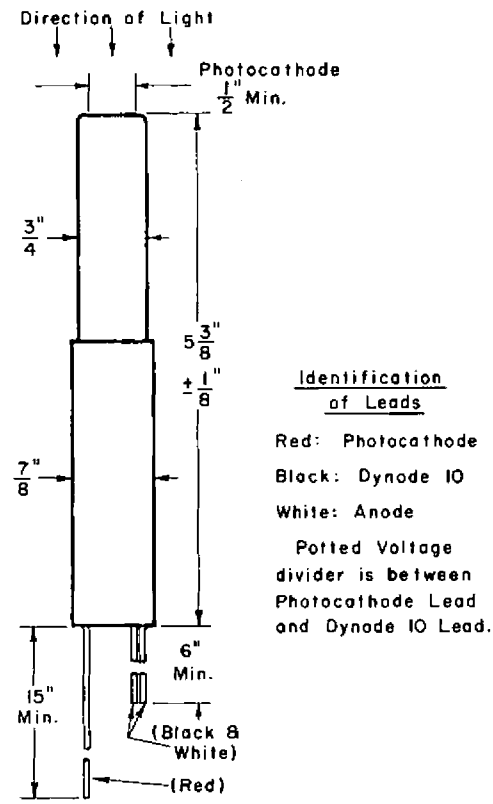
Window Diameter (Min.)	1/2"
Tube Diameter	7/8"
Overall Length (Excluding Leads)	5-3/8" ± 1/8"
Base	Potted Flexible Leads
Mounting Position	Any
Window Index of Refraction	1.5

MAXIMUM RATINGS:

Absolute Maximum Values

Peak Cathode Current (Note 1)	10	max.	μAmpere
Average Anode Current (Note 2)	1	max.	Ma.
Peak Anode Current	5	max.	Ma.
Average Anode Dissipation (Note 2)	0.5	max.	Watt
Peak Anode Dissipation	2.0	max.	Watt
Ambient Temperature	75	max.	°C

1. 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.
2. Averaged over a 30 second interval maximum.



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