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# GAS PHOTOTUBE

BLUE-SENSITIVE

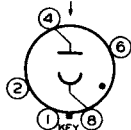
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## DATA

### General:

Spectral Response . . . . .	S-4
Wavelength of Maximum Response . . . . .	4000 ± 500 Angstroms
Cathode:	
Shape . . . . .	Semi-Cylindrical
Minimum Projected Length* . . . . .	13/16"
Minimum Projected Width* . . . . .	5/8"
Direct Interelectrode Capacitance . . . . .	2.6 μmf
Maximum Overall Length . . . . .	3-1/16"
Maximum Seated Length . . . . .	2-1/2"
Seated Length to Center of Cathode . . . . .	1-5/8" ± 3/32"
Maximum Diameter . . . . .	1-5/16"
Bulb . . . . .	T-9
Mounting Position . . . . .	Any
Base . . . . .	Intermediate-Shell Octal 5-Pin

BOTTOM VIEW  
DIRECTION OF LIGHT



Pin 1 - No Connection  
 Pin 2 - No Connection  
 Pin 4 - Anode

Pin 6 - No Connection  
 Pin 8 - Cathode

### Maximum Ratings, Absolute Values:

ANODE-SUPPLY VOLTAGE (DC or Peak AC)	100 max.	volts
PEAK CATHODE CURRENT . . . . .	10 max.	μamp
PEAK CATHODE-CURRENT DENSITY . . . . .	100 max.	μamp/sq. in.
AVERAGE CATHODE CURRENT <sup>o</sup> . . . . .	3 max.	μamp
AMBIENT TEMPERATURE . . . . .	75 max.	°C

### Characteristics:

	<u>Min.</u>	<u>Au.</u>	<u>Max.</u>	
Dark Current at 90 Volts . . . . .	-	-	0.050	μamp
Sensitivity:				
At 4000 Angstroms . . . . .	-	0.125	-	μamp/μwatt
Luminous:				
At 0 Cycles . . . . .	75	135	205	μamp/lumen
At 5000 Cycles . . . . .	-	124	-	μamp/lumen
At 10000 Cycles . . . . .	-	108	-	μamp/lumen
Gas Amplification Factor . . . . .	-	-	5.5	

### Minimum Circuit Values:

#### DC Load Resistance:

With anode-supply voltage of 80 volts or less

For dc currents { above 3 μamp . . . . . 0.1 . . . . . megohm  
 below 3 μamp . . . . . No Minimum

With anode-supply voltage of 100 volts

For dc currents { above 1 μamp . . . . . 2.5 . . . . . megohms  
 below 1 μamp . . . . . 0.1 . . . . . megohm

\* , °: See next page.

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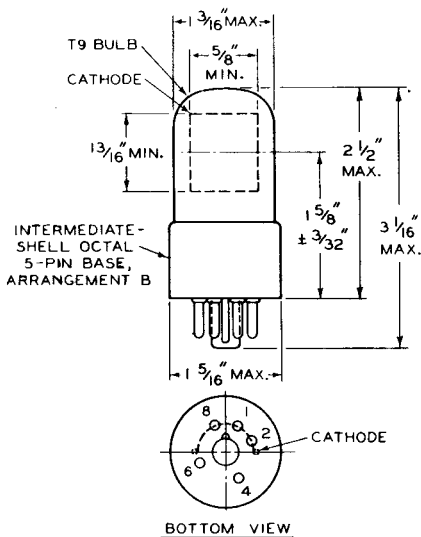


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- \* On plane perpendicular to indicated direction of incident light.  
 O Averaged over any interval of 30 seconds maximum. Average current may be doubled when anode-supply voltage is limited to 80 volts.

SPECTRAL-SENSITIVITY CHARACTERISTIC  
 and  
 FREQUENCY-RESPONSE CHARACTERISTIC  
 of Gas Phototube having S-4 Response  
 are shown at beginning of this Section



92CM-6137R2



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### AVERAGE ANODE CHARACTERISTICS

