



917

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**HIGH-VACUUM PHOTOTUBE**

WITH ANODE TERMINAL CAP

Cathode	Semi-cylindrical	
Photosurface		S2
Window Area		1.0 sq.in.
Direct Interelectrode Capacitance		2.0 $\mu$ f
Maximum Overall Length		4-3/16" to 4-7/16"
Maximum Seated Height		3-9/16" to 3-13/16"
Maximum Diameter		1-3/16"
Bulb (lime glass)		T-8
Cap		Small Metal
Base		Tapered Small 4-Pin
Pin 1 - No Connection		Pin 4 - Cathode (-)
Pin 2 - No Connection		Cap - Anode (+)
Pin 3 - No Connection		
Mounting Position		Any



BOTTOM VIEW

*Maximum Ratings Are Absolute Values***MAXIMUM RATINGS and CHARACTERISTICS**

Anode-Supply Voltage (D.C. or Peak A.C.)	500 max.	volts
Anode Current*	30 max.	$\mu$ amp.
Ambient Temperature	100 max.	$^{\circ}$ C
Luminous Sensitivity*	20	$\mu$ amp./lumen
Sensitivity at 8000 Angstroms	0.0020	$\mu$ amp./ $\mu$ watt
D-C Resistance of Load:		
<i>With anode-supply voltage of</i>		
250 volts		1 min. megohm
<i>With anode-supply voltage of</i>		
500 volts		10 min. megohms

\* On the basis of the use of a sensitive cathode area 1/2" in diameter.

\* Subject to variations as explained on sheet PHOTOTUBE SENSITIVITY MEASUREMENTS in the front of this section.

## OUTLINE DIMENSIONS

for the 917 are the same as those for the 919.

Spectral Sensitivity Characteristic of S2 Photosurface in lime-glass bulb is shown at beginning of this section.

← Indicates a change.

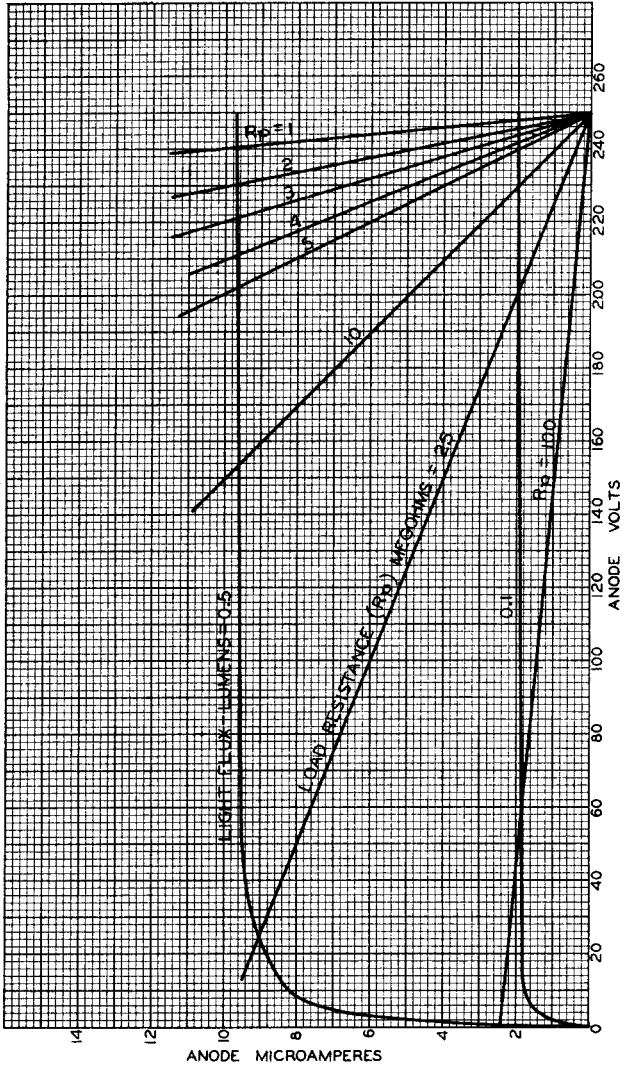
Mar. 20, 1943

RCA VICTOR DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA



## AVERAGE ANODE CHARACTERISTICS





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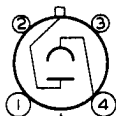
**VACUUM PHOTOTUBE**

LOW-LEAKAGE TYPE WITH ANODE-TERMINAL CAP AND S-I RESPONSE

*For light-measuring and relay applications***DATA****General:**

Spectral Response. . . . .	S-1
Wavelength of Maximum Response . . . .	8000 ± 1000 angstroms
Cathode:	
Shape. . . . .	Semicylindrical
Minimum projected length*. . . . .	1-9/16"
Minimum projected width*. . . . .	5/8"
Direct Interelectrode Capacitance. . . . .	2.2 μmf
Maximum Overall Length . . . . .	4-7/16"
Seated Length. . . . .	3-11/16" ± 1/8"
Seated Length to Center of Cathode . . . . .	2-1/8" ± 3/32"
Maximum Diameter . . . . .	1-1/8"
Mounting Position. . . . .	Any
Weight (Approx.) . . . . .	1.1 oz ←
Bulb . . . . .	T-8 ←
Cap. . . . .	Small (JETEC No. C1-1) ←
Base . . . . .	Dwarf-Shell Small 4-Pin (JETEC No. A4-26) ←
Basing Designation for BOTTOM VIEW . . . . .	1A ←

Pin 1 - No Connection  
Pin 2 - No Connection



DIRECTION OF LIGHT

Pin 3 - No Connection  
Pin 4 - Cathode  
Cap - Anode

**Maximum Ratings, Absolute Values:**

ANODE-SUPPLY VOLTAGE (DC or Peak AC) . . . . .	500 max.	volts ←
AVERAGE CATHODE-CURRENT DENSITY <sup>o</sup> . . . . .	30 max.	μamp/sq. in. ←
AVERAGE CATHODE CURRENT <sup>o</sup> . . . . .	10 max.	μamp ←
AMBIENT TEMPERATURE. . . . .	100 max.	°C ←

**Characteristics, At 250 Volts on Anode:**

	Min.	Median	Max.	
Sensitivity:				
Radiant, at				
8000 angstroms . . . . .	-	0.0018	-	μamp/μwatt ←
Luminous <sup>▲</sup> . . . . .	12	20	40	μamp/lumen ←
Anode Dark Current				
at 25°C. . . . .	-	-	0.005	μamp ←

\* On plane perpendicular to indicated direction of incident light.

<sup>o</sup> Averaged over any interval of 30 seconds maximum.

▲ For conditions where the light source is a tungsten-filament lamp operated at a color temperature of 2870°K. A dc anode supply of 250 volts, a 1-megohm load resistor, and a light input of 0.1 lumen are used.

**SPECTRAL-SENSITIVITY CHARACTERISTIC**  
of Phototube having S-I Response  
is shown at front of this Section

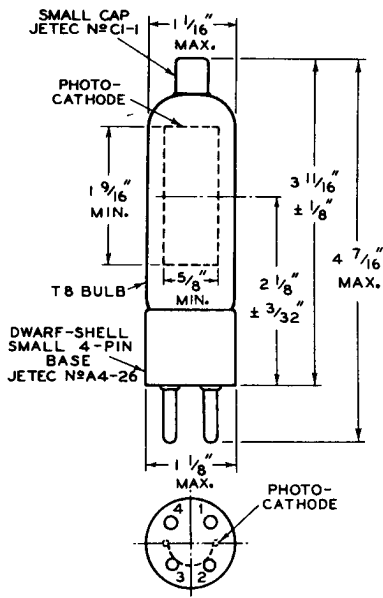
← Indicates a change.

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## VACUUM PHOTOTUBE



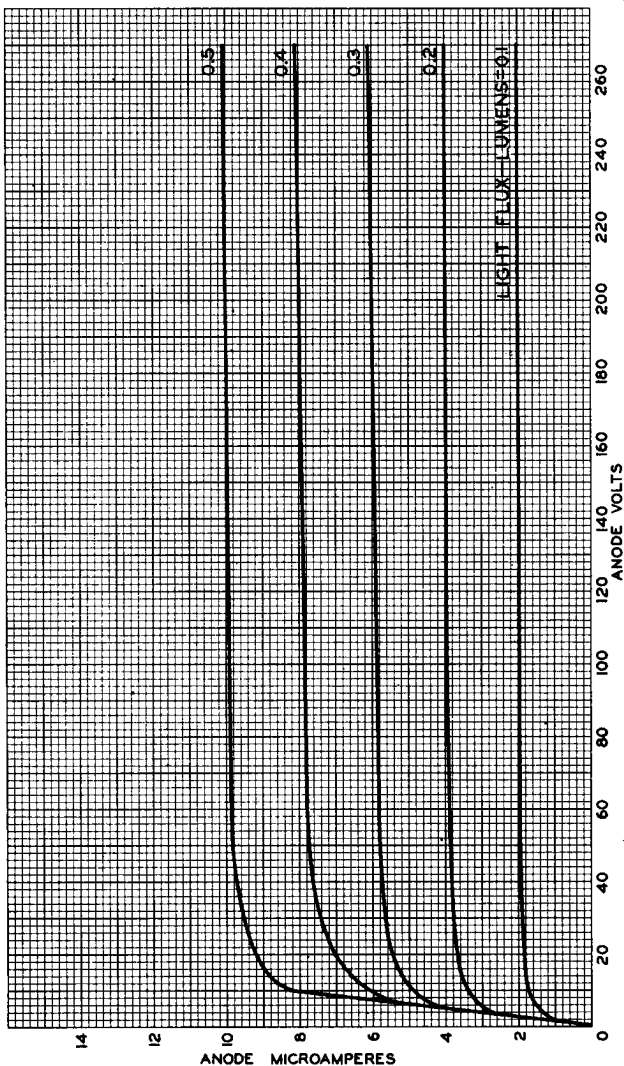
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# AVERAGE ANODE CHARACTERISTICS



LIGHT FLUX - LUMENS = 0.1