



IP4I

GAS PHOTOTUBE

HEAD-ON TYPE WITH S-I RESPONSE

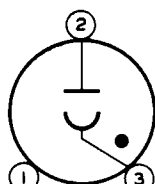
IP4I

DATA

General:

Spectral Response S-1
 Wavelength of Maximum Response. 8000 $\pm$ 1000 angstroms
 Cathode:
 Shape Circular
 Minimum diameter. 9/16"
 Direct Interelectrode Capacitance 1.8 μ f
 Maximum Overall Length. 2-1/16"
 Maximum Seated Length 1-19/32"
 Axial Distance from Bulb Top to Plane through
 Periphery of Cathode Area 5/16" $\pm$ 3/32"
 Maximum Diameter. 13/16"
 Mounting Position Any
 Weight (Approx.) 0.3 oz
 Bulb. T6
 Base. Small-Shell Peewee 3-Pin (JETEC No. A3-1)
 Basing Designation for BOTTOM VIEW. 2AR

Pin 1—No Connection

DIRECTION OF LIGHT
INTO END OF BULBPin 2—Anode
Pin 3—Cathode

Maximum Ratings, Absolute Values:

Rating I Rating II

ANODE-SUPPLY VOLTAGE (DC or Peak AC)	70 max.	90 max.	volts
AVERAGE CATHODE- CURRENT DENSITY ^o	40 max.	20 max.	μ amp/sq.in.
AVERAGE CATHODE CURRENT ^o	3 max.	1.5 max.	μ amp
AMBIENT TEMPERATURE	100 max.	100 max.	$^{\circ}$ C

Characteristics, With 90 Volts on Anode:

Min. Median Max.

Sensitivity:			
Radiant, at			
8000 angstroms.	—	0.008	— μ amp/ μ watt
Luminous:			
At 0 cps.	50	90	145 μ amp/lumen
At 5000 cps	—	77	— μ amp/lumen
At 10000 cps.	—	67	— μ amp/lumen
Gas Amplification Factor.	—	—	8.5
Anode Dark Current			
at 25 $^{\circ}$ C.	—	—	0.1 μ amp

^o, $\bullet$: See next page.

← Indicates a change.



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Minimum Circuit Values:

With anode-supply voltage of 70 or less 90 volts

DC Load Resistance:

For dc currents above

1.5 μ amp. 0.1 min. - megohm

For dc currents below

1.5 μ amp. 0 min. - megohm

For dc currents above

1 μ amp. - 2.5 min. megohms

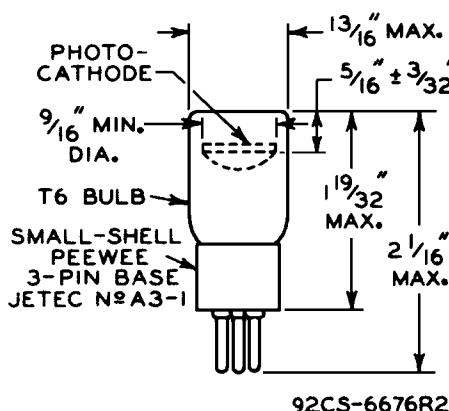
For dc currents below

1 μ amp. - 0.1 min. megohm

o 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 90 volts and a 1-megohm load resistor are used. For the 0-cycle measurements, a light input of 0.06 lumen is used. For the 5000- and 10000-cycle measurements, the light input is varied sinusoidally about a mean value of 0.015 lumen from zero to a maximum of twice the mean.

SPECTRAL-SENSITIVITY CHARACTERISTIC
of Phototube having S-1 Response
and
FREQUENCY-RESPONSE CHARACTERISTICS
of Gas Phototubes
are shown at the front of this Section

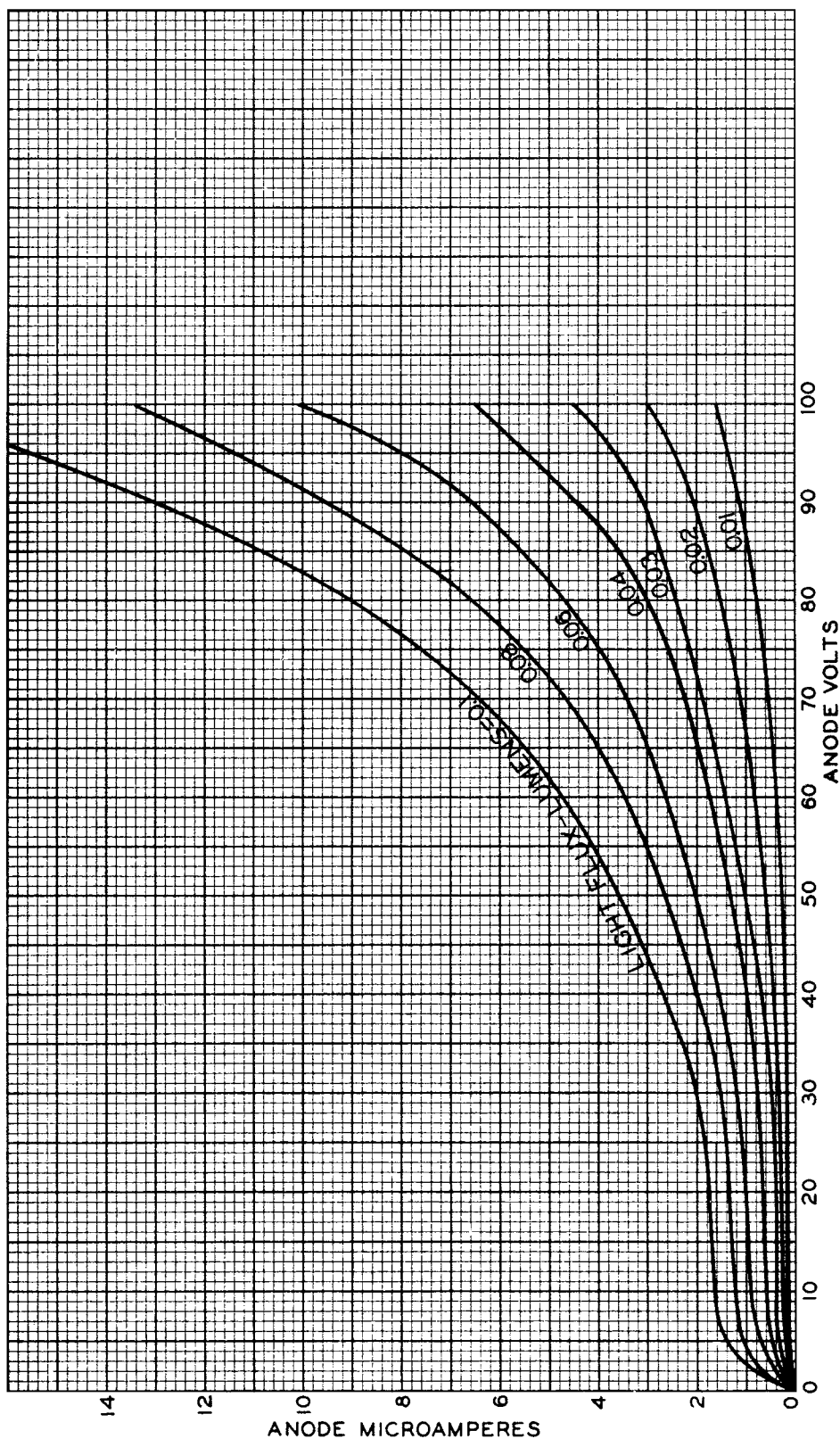




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AVERAGE ANODE CHARACTERISTICS



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TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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