



7043

7043

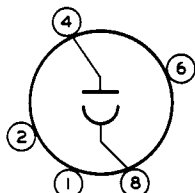
VACUUM PHOTOTUBE

NON-DIRECTIONAL TYPE WITH S-4 RESPONSE

DATA**General:**

Spectral Response. S-4
Wavelength of Maximum Response 4000 ± 500 angstroms
Cathode:
Shape. Cylindrical
Minimum length $13/16"$
Minimum diameter $9/16"$
Direct Interelectrode Capacitance (Approx.). $6 \mu\text{mf}$
Maximum Overall Length $3-5/16"$
Maximum Seated Length. $2-3/4"$
Seated Length to Center of Cathode $1-7/8" \pm 3/32"$
Maximum Diameter $1-9/32"$
Operating Position Any
Weight (Approx.) 1.4 oz
Bulb T9
Base Intermediate-Shell Octal 5-Pin (JETEC No. B5-10)
Basing Designation for BOTTOM VIEW 8JD

Pin 1 - No Connection
Pin 2 - No Connection



Pin 4 - Anode
Pin 6 - No Connection
Pin 8 - Cathode

DIRECTION OF LIGHT:
ANY THAT IS PERPENDICULAR
TO AXIS OF PHOTOCATHODE

Maximum Ratings, Absolute Values:

ANODE-SUPPLY VOLTAGE (DC or Peak AC). . .	250 max.	volts
AVERAGE CATHODE-CURRENT DENSITY [•]	25 max.	$\mu\text{a/sq. in.}$
AVERAGE CATHODE CURRENT [•]	5 max.	μa
AMBIENT TEMPERATURE.	75 max.	$^{\circ}\text{C}$

Characteristics:

*With an anode-supply voltage of 250[▲] volts
unless otherwise specified*

Min. Median Max.

Sensitivity:

Radiant, at 4000 angstroms.	-	0.045	-	$\mu\text{a}/\mu\text{W}$
Luminous: [#]				
At 250 volts	20	45	65	$\mu\text{a}/\text{lumen}$
At 90 volts.	-	41	-	$\mu\text{a}/\text{lumen}$
Luminous-Sensitivity				
Uniformity*.	-	-	1.55	
Ratio of Luminous Sensitivity at 250 Volts to Luminous Sensitivity at 90 Volts.	-	-	1.25	
Anode Dark Current at 25 [°] C	-	-	0.0125	μa

[•], [▲], [#], * : See next page.



VACUUM PHOTOTUBE

- Averaged over any interval of 30 seconds maximum.
- ▲ Operation of the 7043 below 50 volts is not recommended.
- # For conditions where the light source is a tungsten-filament lamp operated at a color temperature of 2870° K. A 1-megohm load resistor and a light input of 0.1 lumen are used.
- * Ratio of highest sensitivity to lowest sensitivity when tube is rotated about its axis through 360° , with incident light perpendicular to axis of photocathode, and with light spot 1/2 inch in diameter.

OPERATING CONSIDERATIONS

Exposure to intense illumination, such as direct sunlight, may decrease the sensitivity of the 7043 even though no voltage is applied to the tube. The magnitude and duration of the decrease depend on the length of the exposure.

Shielding of the 7043 and its leads to the amplifier is recommended when amplifier gain is high or when the phototube load resistance is high. Whenever frequency response is important in a phototube circuit, the leads from the phototube to the amplifier should be made short so as to minimize capacitance shunting of the phototube load. Since a phototube is a high-resistance device, it is important that insulation of associated circuit parts and wiring be adequate.

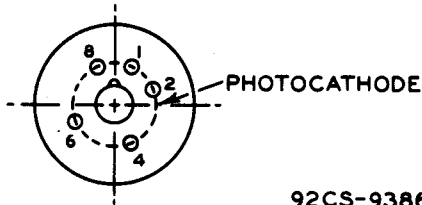
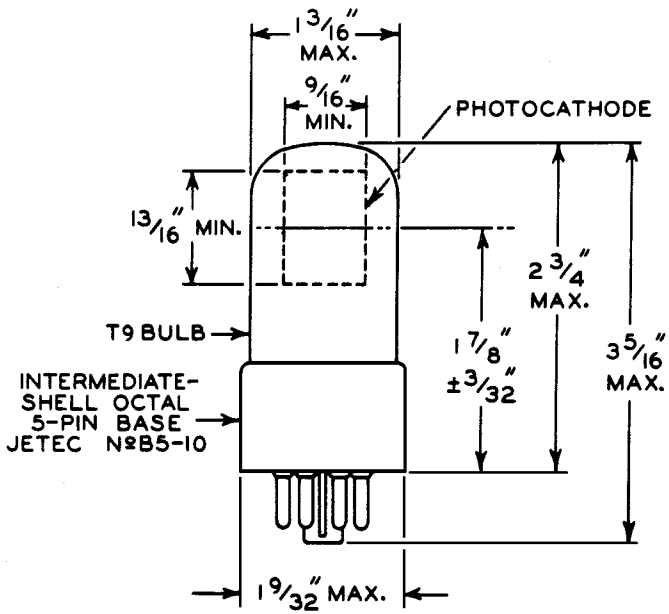
SPECTRAL-SENSITIVITY CHARACTERISTIC
of Phototube having S-4 Response
is shown at the front of this Section



7043

7043

VACUUM PHOTOTUBE



92CS-9386

7043



7043

AVERAGE ANODE CHARACTERISTICS

LIGHT SOURCE IS A TUNGSTEN-FILAMENT LAMP OPERATED AT COLOR TEMPERATURE OF 2870° K.

