



# PHOTOTUBE

## DESCRIPTION

The GL-917 is a two-electrode high-vacuum phototube for measurement and relay applications. It has high sensitivity in the red and infrared regions of the spectrum. Construction affords high resistance to leakage current between electrodes, with resultant stability of operation and permanence

of calibration. The anode of the GL-917 is connected to the top cap, while in the GL-919 the cathode is connected to the top cap. As a result of this reversal of connections, the GL-917 may be used in series with the GL-919 with resultant very small leakage current and high overall sensitivity.

## TECHNICAL INFORMATION

*These data are for reference only. For design information refer to specifications.*

### GENERAL CHARACTERISTICS

Number of electrodes . . . . . 2

#### Electrical

|   |        |                           |
|---|--------|---------------------------|
| Spectral response . . . . .                           | S-1    |                           |
| Luminous sensitivity at 250 volts, 0 cycles . . . . . | 20     | microamperes per lumen    |
| Interelectrode capacitance . . . . .                  | 2.0    | micromicrofarads          |
| Wavelength of maximum response . . . . .              | 8000   | angstroms                 |
| Sensitivity at maximum response . . . . .             | 0.0020 | microampere per microwatt |



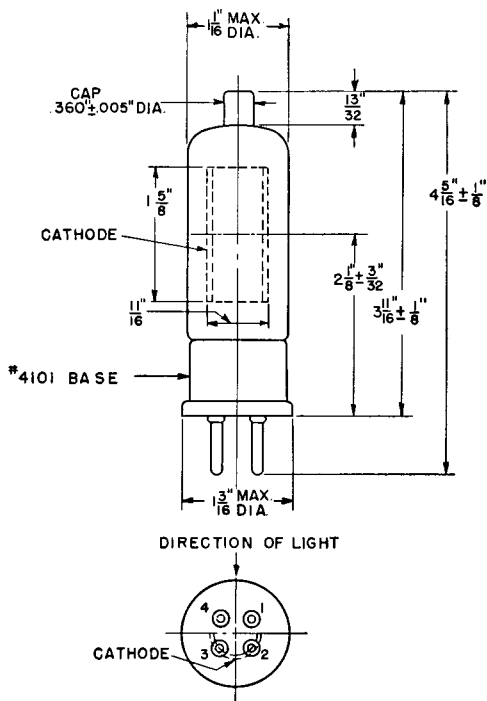
**TECHNICAL INFORMATION (CONT'D)**

**Mechanical**

|  |  |
|--|--|
| Window dimensions .....                              | $\frac{11}{16} \times 1\frac{5}{8}$ inches |
| Seated height to center of useful cathode area ..... | $2\frac{1}{8} \pm \frac{3}{32}$ inches     |
| Maximum over-all height .....                        | $4\frac{7}{16}$ inches                     |
| Maximum seated height .....                          | $3\frac{13}{16}$ inches                    |
| Maximum diameter .....                               | $1\frac{3}{16}$ inches                     |
| Cap .....  | M8-125                                     |
| Base .....   | M8-074                                     |
| Mounting position .....                              | Any  |
| Net weight, approx .....                             | $\frac{3}{4}$ ounce                        |
| Shipping weight, approx .....                        | 3 pounds                                   |

**MAXIMUM RATINGS**

|                                      |                                  |
|--------------------------------------|----------------------------------|
| Anode voltage, d-c or peak a-c ..... | 500 volts                        |
| Cathode current density .....        | 152 microamperes per square inch |
| Ambient temperature .....            | 100 centigrade                   |

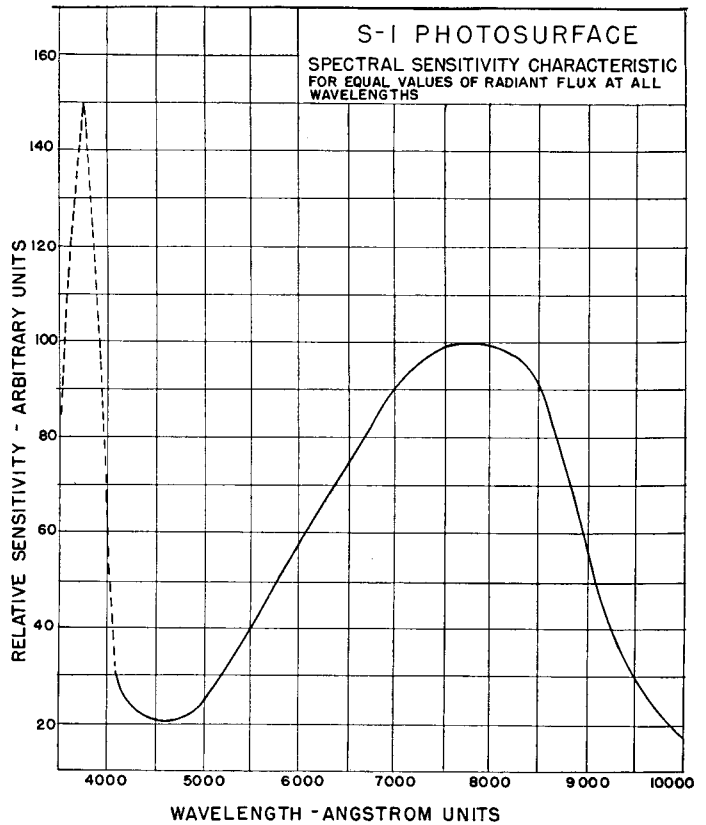


| PIN     | GL-917  | GL-919  |
|---------|---------|---------|
| 1       |         |         |
| 2       |         | ANODE   |
| 3       |         |         |
| 4       | CATHODE |         |
| TOP CAP | ANODE   | CATHODE |

OUTLINE  
 PHOTOTUBE GL-917

K-8277038

6-30-44



K-8639626

4-17-44