PHOTOCONDUCTIVE CELL TYPE 61SV

The 61SV is an uncooled lead sulphide photoconductive cell intended for use with a chopped or pulsating radiation, having a high infra-red sensitivity at normal room temperatures.

PHYSICAL SPECIFICATIONS

- Maximum overall length: 1 5/8" (41mm)
- Maximum seated height: 1 1/8" (28.5mm)
- Maximum diameter: 7/8" (22mm)
- Base: 2-pin
- Sensitive area: 0.06 sq. in. (0.36 cm²)

ABSOLUTE MAXIMUM RATINGS

- Maximum applied voltage: 250 Volts
- Maximum current: 500 µAmps
- Maximum operating ambient temperature: 60°C
- Maximum storage temperature: 60°C

CHARACTERISTICS

- Peak spectral response: 2.5 microns
- Spectral response range: 0.3 to 3.5 microns
- Sensitivity
  a) Black body at 200°C: 180 µVrms/µW (peak)
  b) Signal to noise ratio: 150
  c) Noise equivalent power (bandwidth = 10/s): 5.0 x 10⁻⁹ Watts

(Conditions:— 4.9 µWatts of radiation falling on the cell area with 200 Volts applied to the cell and with a 1.0 M ohm load resistor. The interruption frequency of the radiation is 800c/s and the measuring amplifier has a bandwidth of 50c/s).

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CHARACTERISTICS (continued)

Sensitivity
b) Tungsten light \( 3.0 \text{ mAmps(pk)/lm} \)

(Conditions: Chopped light, 0.05 lumens from a lamp at colour temperature 2700\(^\circ\)K falling on the cell area, and with 200 Volts applied to the cell).

Cell resistance \( 1.0 \) to \( 4.0 \) M ohms
Time constant \( 75 \) \( \mu\)sec.
Noise equivalent power at \( 2 \pm 0.05 \) microns \( 5.5 \times 10^{-11} \) Watts
Variation of dark resistance with ambient temperature \( -2 \) \% per \( ^\circ\)C
Approximate sensitive area
0.5mm

View of window

Locating slot

View of B2B Base

All dimensions in mm