#### DATA FOR E.I.A. REGISTRATION

MULLARD LIMITED, Mullard House, Torrington Place, LONDON.W.C.1., England.

JEDEC TYPE NO. 7634

### 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. (0.36cm<sup>2</sup>)

### ABSOLUTE MAXIMUM RATINGS

Maximum applied voltage250 VoltsMaximum current500 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)

Signal to noise ratio 150

Noise equivalent power (bandwidth = 1c/s) 5.0 x  $10^{-9}$  Watts

(Conditions:- 4.9  $\mu$ Watts 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).

# CHARACTERISTICS (continued)

Sensitivity

b) Tungsten light 3.0 mAmps(pk)/lm

(Conditions: - Chopped light, 0.05 lumens from a lamp at colour temperature 2700°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

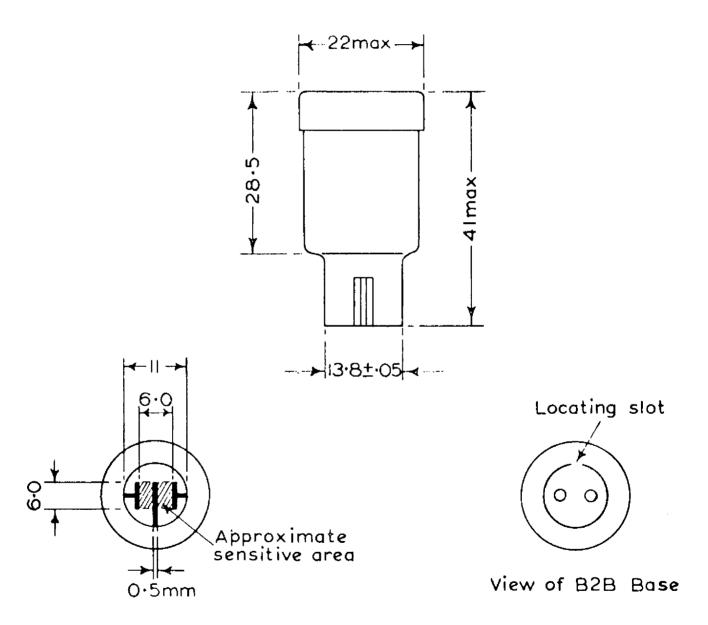
75 µsec.

Noise equivalent power at  $2 \pm 0.05$  microns

5.5 x 10-11 Watts

Variation of dark resistance with ambient temperature

-2 % per °C



View of window

All dimensions in mm