

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 <sup>5</sup> / <sub>8</sub> " (41mm)
Maximum seated height	1 <sup>1</sup> / <sub>8</sub> " (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 voltage	250 Volts
Maximum current	500 $\mu$ Amps
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 $\mu$ Vrms/ $\mu$ W (peak)
Signal to noise ratio	150
Noise equivalent power (bandwidth = 1c/s)	5.0 x 10 <sup>-9</sup> 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

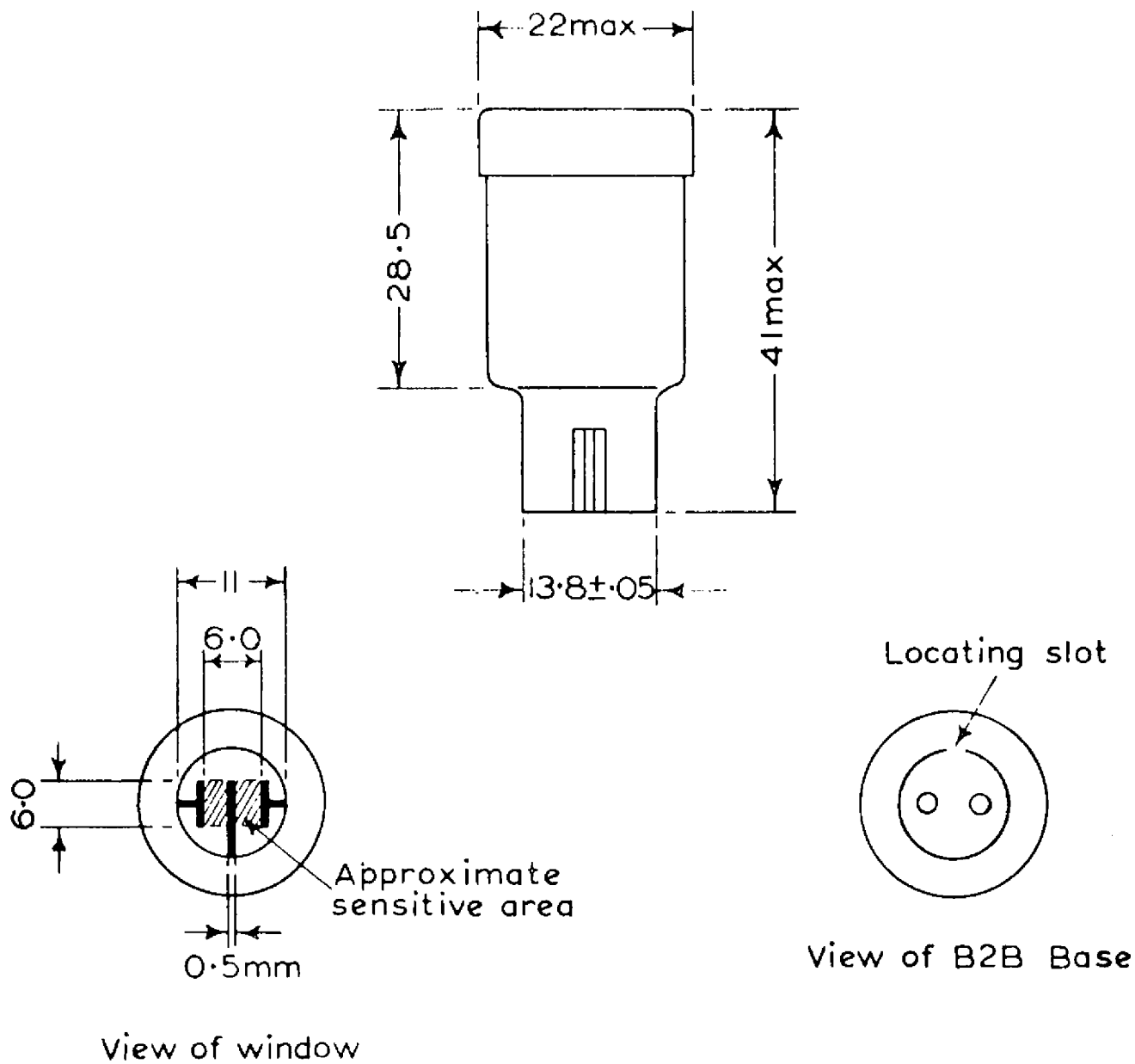
(Conditions:- Chopped light, 0.05 lumens from a lamp  
at colour temperature 2700°K falling on the cell area,  
and with 200 Volts applied to the cell).

Cell resistance                      1.0 to 4.0 M ohms

Time constant                      75 μsec.

Noise equivalent power at  
2 ± 0.05 microns                      5.5 x 10<sup>-11</sup> Watts

Variation of dark resistance  
with ambient temperature              -2 % per °C



All dimensions in mm