

**GENERAL**

The 27A12 is a vacuum Photo-Cell with a caesium antimony cathode surface, having maximum sensitivity in the blue region of the spectrum. It has a high sensitivity to daylight, but negligible infra-red response. It may be used for sound reproduction, counting applications, etc.

**RATINGS—Absolute values**

Maximum working voltage		100	V
Maximum mean cathode current (max averaging time 30 sec)	$I_{k(av)max}$	5.0	$\mu A$
Maximum ambient temperature	$T_{amb(max)}$	70	$^{\circ}C$

**INTER-ELECTRODE CAPACITANCE**

Anode/cathode	$C_{a-k}$	0.7	pF
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**CHARACTERISTICS**

Average overall sensitivity (approx)		45*	$\mu A/L$
Maximum dark current	$I_{dark(max)}$	0.005†	$\mu A$
Minimum insulation resistance between electrodes		20,000	M $\Omega$

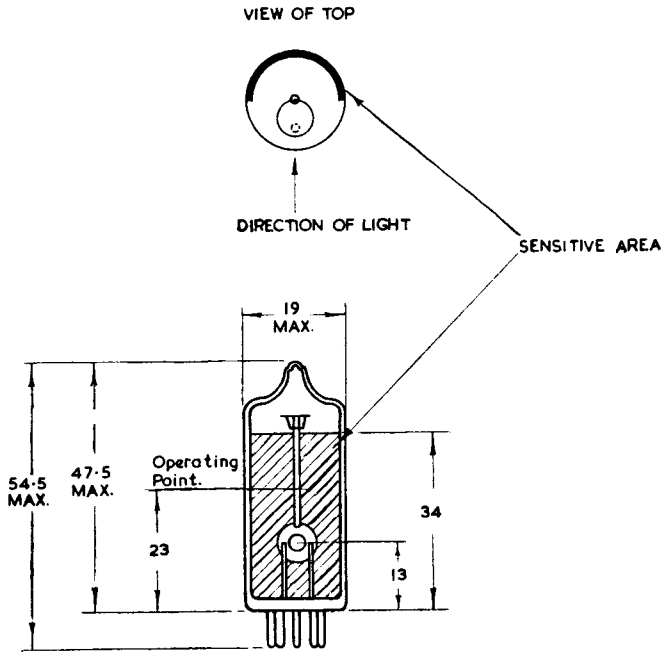
\* Measured at 0.04 lumens with a lamp colour temperature of 2700°K and a cell series resistance of 1.0M $\Omega$ . Anode voltage = 100V.

† Measured at 100V and 1.0M $\Omega$  series resistance, zero illumination.

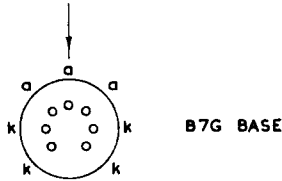
**DIMENSIONS**

Maximum overall length	54.5 mm
Maximum seated height	47.5 mm
Light centre from seat	23 mm
Maximum diameter	19 mm
Approximate cathode width	18 mm
Approximate cathode length	32 mm

**MOUNTING POSITION—Unrestricted**



DIRECTION OF LIGHT



VIEW OF FREE END.

All dimensions in mm.

The cathode connection should be made to pins 1, 2, 6 and 7 connected together and the anode connection to pins 3, 4 and 5 connected together.



SPECTRAL RESPONSE OF ANTIMONY CAESIUM PHOTO-CATHODE

