

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	μA
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†	μA
Minimum insulation resistance between electrodes		20,000	M Ω

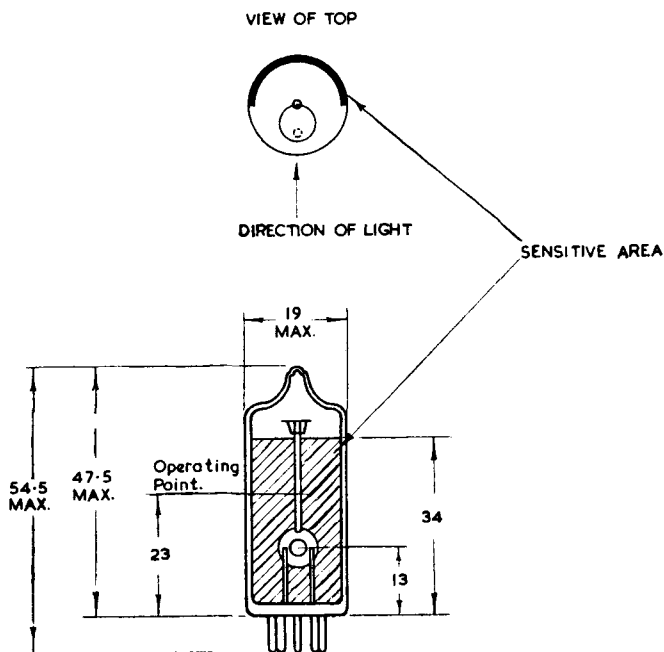
* Measured at 0.04 lumens with a lamp colour temperature of 2700°K and a cell series resistance of 1.0M Ω . Anode voltage = 100V.

† Measured at 100V and 1.0M Ω series resistance, zero illumination.

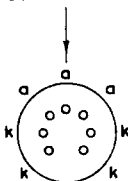
DIMENSIONS

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



B7G BASE

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

