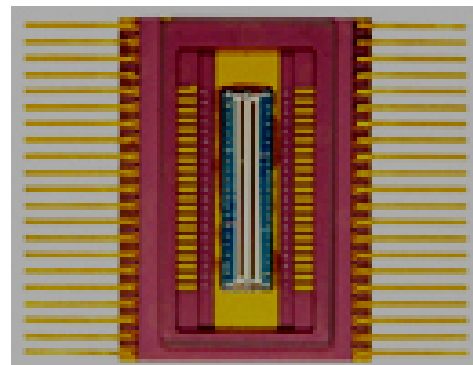


LINEAR CCD 30L

Linear CCD 30L consists of two identical linear 1024 pixel CCDs. The lines on a chip are oriented in parallel, each has bilinear arrangement and comprises separate sections for charge packet detection and accumulation. Antiblooming permits CCD to operate at device overillumination factor no less than 100. Electronic exposure mode ($\geq 10 \mu\text{s}$) is also provided.



Application:

- Spectral analysis equipment in 0.4-0.9 μm spectral range;
- Optoelectronic systems of space orientation;
- Object size measuring non-contact systems.

Linear CCD 30L is produced in two modifications. Main parameters are presented below.

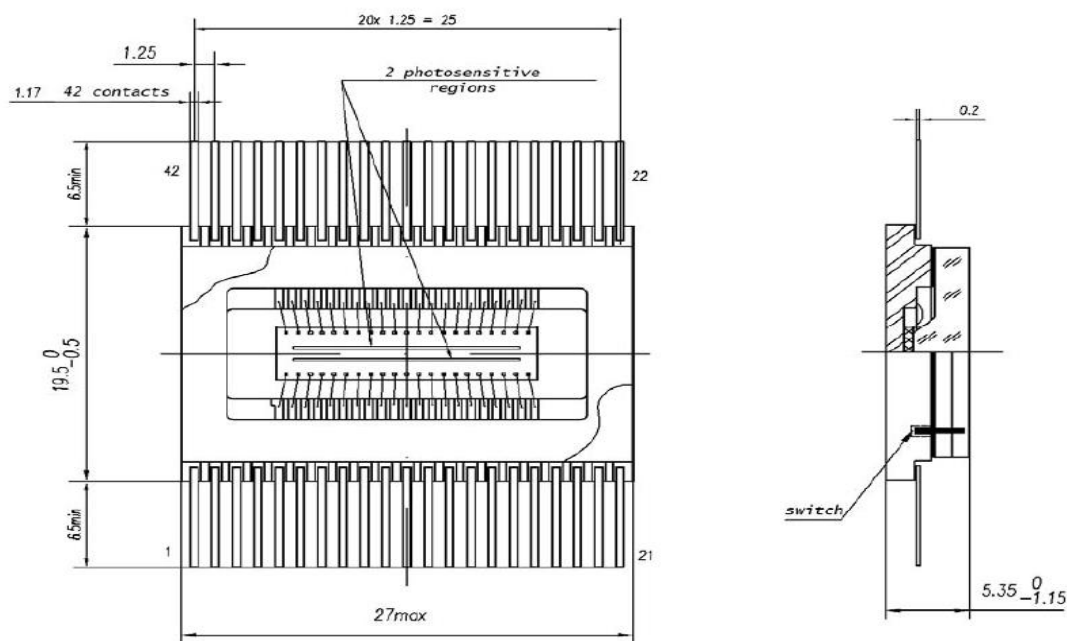
Main parameters

Parameters	CCD 30L with mask	CCD 30L*
Number of pixels	2×1024	2×1024
Pixel size, μm^2	13×26	13×150
Pixel pitch, μm	13	13
Package dimensions, mm	26.5×19.5	26.5×19.5
Distance between centers of CCDs, μm	900	900
Photosensitive region error in parallelism relative to base surface (glass outside surface), mm	0.01	-
Register control	4-phase	4-phase
Max. data output rate, MHz	5	5
Saturation signal, V	1.5	2.4
Dynamic range	≥ 2000	≥ 6000
Responsivity (source of A type with C3C-23 at output signal frequency 200 kHz), $\text{V}/\text{lx}\cdot\text{s}$	0.8	12
Relative luminous nonuniformity, %	10	± 4
Relative dark signal nonuniformity, %	5	1

Max. voltage on terminals, V	-	20
Operation temperature range, °C	-50 ÷ +50	-50 ÷ +50

*When input window is used without light shielding screen

DIMENSIONAL OUTLINE



SPECTRAL RESPONSE CHARACTERISTICS

CCD with mask

