

LINEAR CCD 32L

Linear CCD 32L consists of two identical linear 2600 pixel CCDs with axis symmetry and independent control.

Each CCD has bilinear arrangement and comprises separate sections for charge detection and accumulation. Antiblooming permits CCD 32L to operate at device overillumination factor no less than 100. Electronic exposure mode ($\geq 10 \mu\text{s}$) is also provided.



Application:

Linear CCD 32L is intended for application in spectroscopy, coordinate measuring systems, systems of space orientation and space equipment engineering.

SPECIFICATIONS

Number of pixels	2×2600
Pixel size, (H×V), μm^2	12×100
Pixel pitch, μm	12
Photosensitive region length, mm	≥ 13.3
Distance between ends of linear CCDs, μm	$32 \times 27 \times 5.7$
Package overall dimensions, mm	41,6×17,4
Register control	4-phase
Max. data output rate, MHz	5
Saturation signal, V	2.4
Dynamic range, dB	6000
Responsivity (source of A type with C3C-23, at output signal 200 kHz), V/lx·s	12
Relative luminous nonuniformity, %	± 5
Relative dark signal nonuniformity, %	0.1
Max. voltage on terminals, V	20
Max. operation frequency, MHz	2.5
Operation temperature range, °C	-50 ÷ +50

[illegible]

The graph shows the spectral responsivity of the GaAs/AlGaAs heterostructure. The x-axis represents wavelength in nanometers (nm), ranging from 300 to 1000 nm. The y-axis represents responsivity in units, ranging from 0 to 1.0. The curve starts at approximately 350 nm, rises to a local maximum of about 0.68 units at 560 nm, and then reaches a broad peak of approximately 0.88 units at 780 nm. The responsivity decreases after the peak, reaching zero at 1000 nm.

wavelength, nm	Responsivity, units
350	0.00
400	0.28
450	0.42
500	0.58
550	0.68
600	0.75
650	0.80
700	0.84
750	0.87
780	0.88
800	0.88
850	0.82
900	0.68
950	0.42
1000	0.00