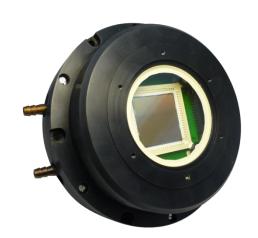


FPU -2M PHOTODETECTOR

FPU-2M is intended for wide application, including: detection of small size objects with higher accuracy. It is used in TV systems of image conversion and processing with continuous and pulse illumination as well as in measurement equipment.



- CCD chip;
- thermoelectric battery (TEB);
- package;
- removable input window.



FPU-2M basic photosensitive element is cooled with 4096x4096 CCD.

The CCD is a silicon thinned frame transfer n-channel device based on p-type substrate.

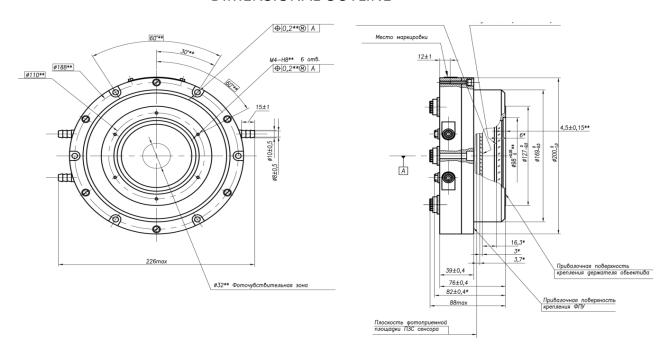
SPECIFICATIONS

Saturation voltage, mV	> 600
Saturation charge, thousand of electrons	> 120
Dynamic range	> 2400
Quantum efficiency in spectral range maximum, %	> 80 (1)
Spectral response, nm	300-1000 (1)
Dark signal, mV/s	<100
Relative dark signal nonuniformity, %	<4
Relative luminous nonuniformity, %	<20
Transfer efficiency along the horizontal	>0.99995
Transfer efficiency along the vertical	>0.99995
Pixel size, μm	11x11
CCD chip thermoelectric cooling relative external temperature, K	>30

Number of pixels	4096x4096
Register operation frequency, MHz	>1.0

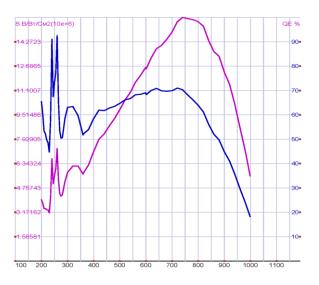
(1) For backside illuminated thinned CCD.

DIMENSIONAL OUTLINE

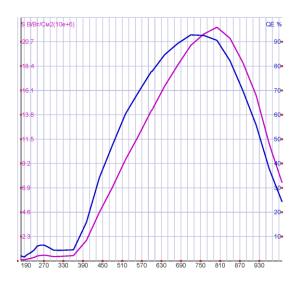


SPECTRAL RESPONSE CHARACTERISTIC

Backside illuminated CCD



CCD illuminated from electrode side



Tel.: +7 (812) 552-61-54 Fax: +7 (812) 552-61-54 E-mail: info@electron.spb.ru Site: www.electron.spb.ru