

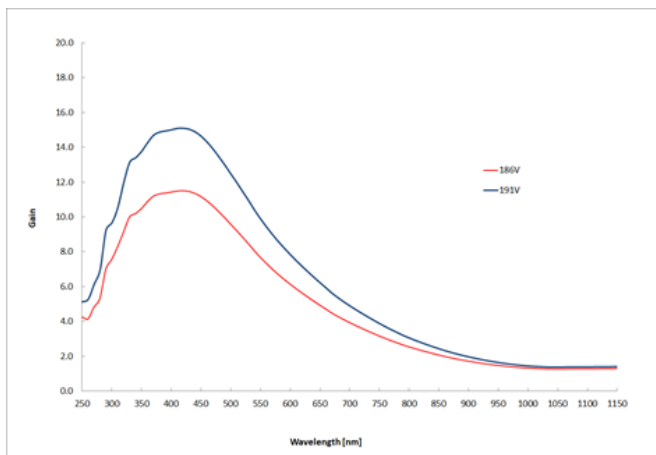
Avalanche photodiode with enhanced blue & ultra violet amplification (BVAPD)

APPLICATION

APDs are widely used for low level light detection. Standard APDs have a peak sensitivity at wavelengths > 500 nm. Our new BV-APD achieves outstanding performance for UV and blue light.

Possible applications are

- Fluorescence light detection and microscopy
- Spectrometry
- Stray light detection
- Electromagnetic calorimeter
- any other low light effects



PARAMETERS OF FIRST DEVICES

With an in-house silicon wafer manufacturing, the CiS Research Institute offers full freedom in design of customized BVAPDs. Our first devices offers the following features:

PARAMETER	VALUE / RANGE
Chip size	5.0 x 5.0 mm ²
Active area	4.4 x 4.4 mm ²
Operation bias	Up to 210 V (+/- 2 V)
Spectral Response	250 ... 700 nm
Dark currents	0.3 nA @20C (+/-5%) 26 nA@20C (+/-10%)
Capacitance (20V)	245 pF (+/-10%)
Gain	> 100 for ~ 400...450 nm



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