

PHOTO DIODES

The ModuS U6 process allows the integration of versatile photo diodes. Two types with different spectral sensitivities are available:

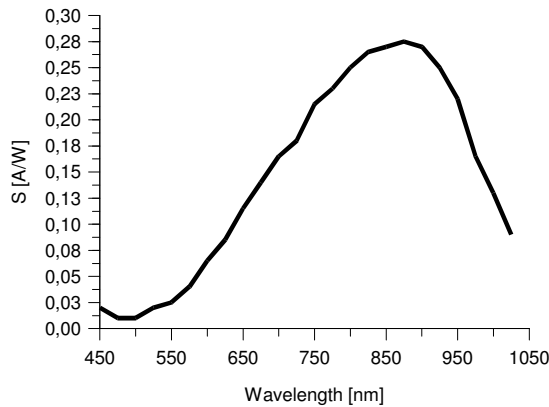
- ◆ **NWELL/PSUB: red and infrared**
- ◆ **NWELL/PBAS: visible range**

Both types show a low dark current and therefore an excellent dynamic range. In addition, the sensitivity is very high in comparison with standard photo sensors.

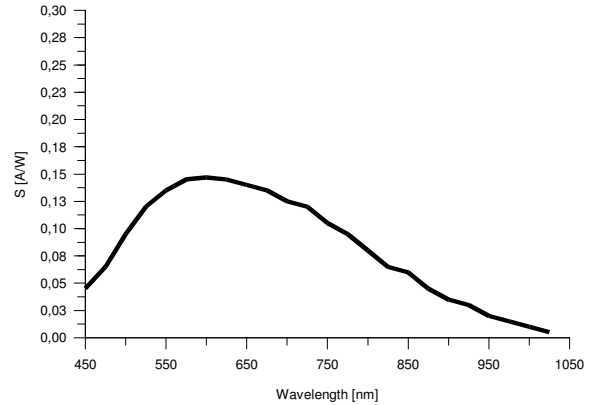
The ModuS U6 process produces photo diodes with high yield, and therefore at low costs. The combination of photo sensors and signal processing circuits together with digital functions allows to manufacture highly integrated systems, which are suitable for a large variety of applications, e.g. opto electronics, consumer applications and for the automotive industry.

The characteristics on the following pages show the spectral sensitivity, the dark currents and reverse bias behaviour for NWELL/PSUB and NWELL/PBAS photo diodes, each for a sensor area of 1mm².

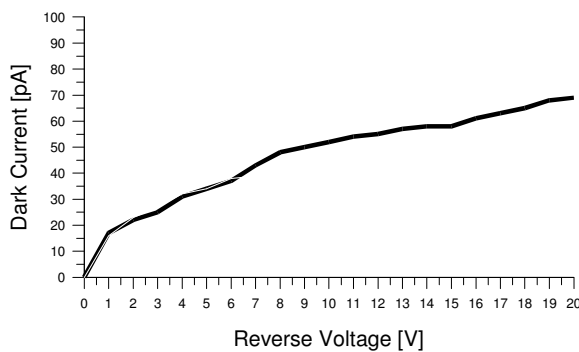
The spectral sensitivity and the dark current of the **NWELL/PSUB and NWELL/PBAS photo diodes** is shown in the following diagrams, related to an area of 1mm², respectively.



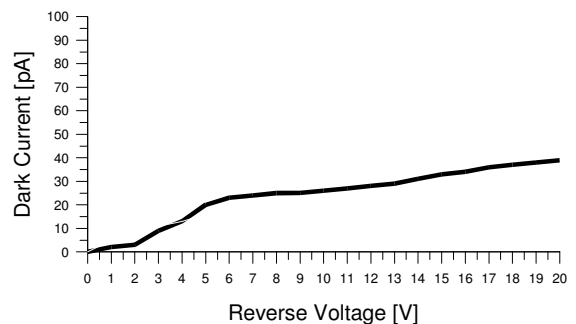
Spectral sensitivity NWELL/PSUB



Spectral sensitivity NWELL/PBAS



Dark current NWELL/PSUB, 1mm²



Dark current NWELL/PBAS, 1mm²