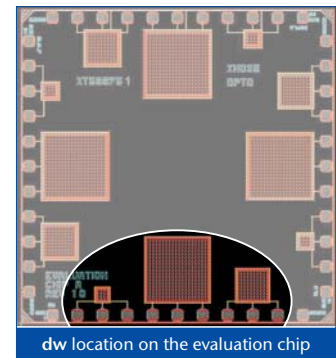
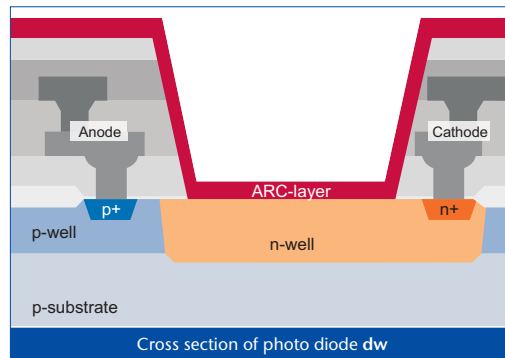




## > XH035 Photo Diode Evaluation Chip

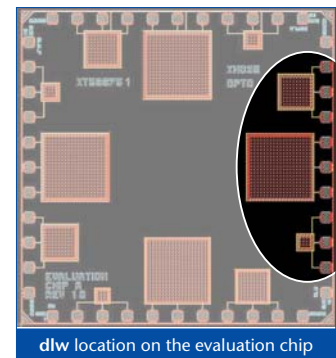
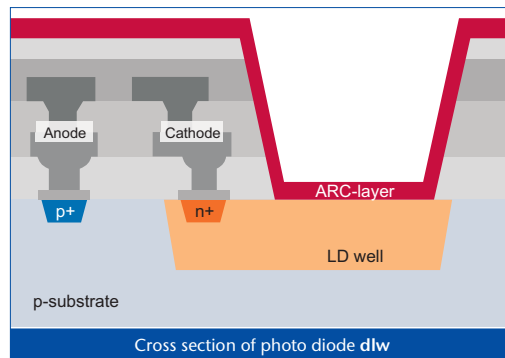
### dw (NWell / PSub)

The dw diode is created between the n-well and the p-substrate as available in all core modules of XH035.



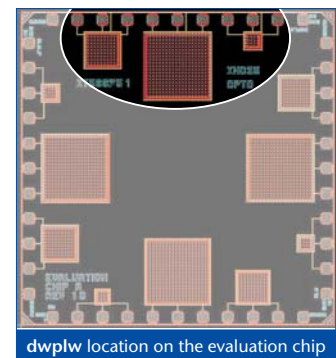
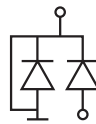
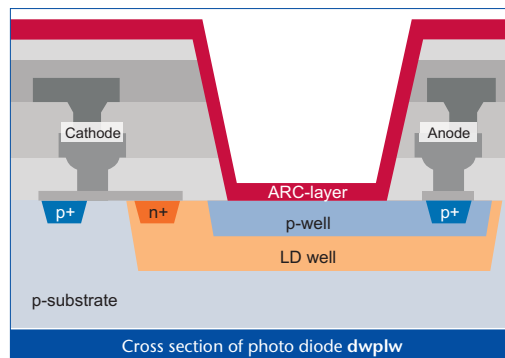
### dlw (LDWell / PSub)

The dlw is a diode between the lightly doped deep n-well (LDWell) and p-substrate. In addition to the core module, dlw needs the ISOMOS module. The photo diode dlw is sensitive over a wide spectrum from blue light 400nm to near infrared light of 850nm.



### dwplw (PWell / LDWell)

The dwplw is based on the stacked diode built by p-well, lightly doped deep n-well (LDwell) and p-substrate. The diode describes the pn-junction at the top side, p-well to lightly doped deep n-well. The lightly doped deep n-well is set to the potential of p-substrate. Therefore only the upper pn-junction is optically active. That means this diode is most sensitive for blue light.



### dlw\_p

#### (LDWell (pinched with PWell) / Psub)

The dlw\_p is based on the stacked diode built by p-well, lightly doped deep n-well (LDwell) and p-substrate. The diode describes the pn-junction at the bottom side, lightly doped deep n-well to p-substrate. The p-well is set to the potential of lightly doped deep n-well, hence the p-well pinches the lightly doped deep n-well. Therefore only the bottom pn-junction is optically active. That means this diode is most sensitive for near infrared light.

