

QSPIN Ultra Low Noise PIN Photodiodes

Features

- Ultra low dark current
- Low capacitance
- Backside or frontside illuminated
- Tile able architecture

Applications

- Gamma camera detectors
- Nuclear medicine
- X-ray spectroscopy
- X-ray computed tomography
- XRF analyzers
- Explosives detection systems (EDS)
- Astrophysics
- High energy physics

Description

QSPIN PIN photodiodes offer the **lowest dark current** available in the industry. Current Quicksil is producing product that **measures < 6 pA/mm² @ 200V**

Electrical and Dimensional Specifications

Part Number	Die thickness (microns)	Effective Active Area (mm ²)	Die Stepping Distance XSTEP x YSTEP (mm x mm)	Dark Current ^[2] I _D (pA)	Junction Capacitance ^[2] C _J (pF)	Reach Through Voltage ^[3] V _{RT} (V)	Maximum Reverse Voltage V _{RMAX} (V)
QSPINP01	400	5.0	4.5 x 4.5	31	2.0	60	80
QSPINP55	625			46	1.9	110	150
QSPINP75	875			56	1.8	160	210
QSPINP12	625	13.0	6.5 x 6.5	108	2.9	60	80
QSPINP22	875			115	2.7	110	150

Example Application

