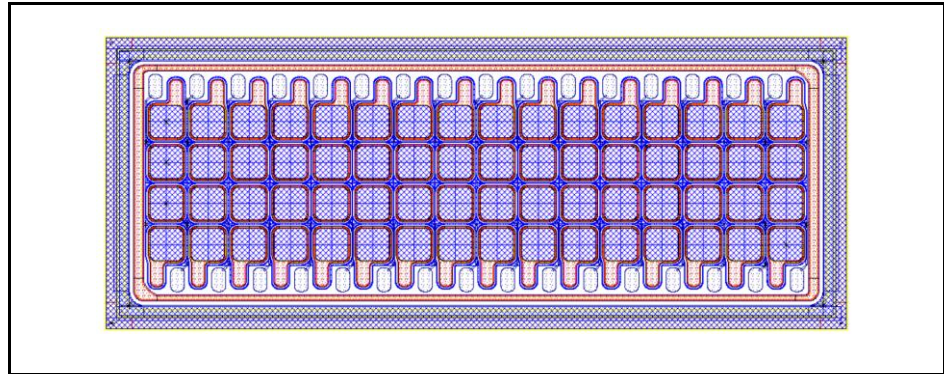
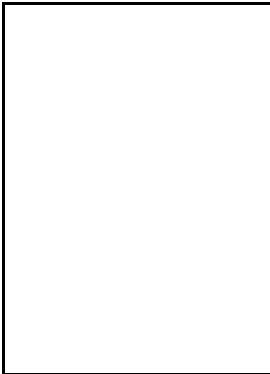


Preliminary for A - samples



Features

- 64 element APD array
- High speed, low noise

Description

Matrix APD array chip for NIR detection.

Application

- LIDAR applications

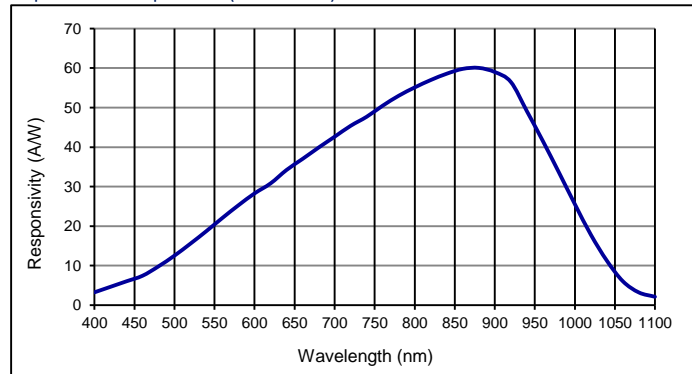
RoHS

2011/65/EU

Absolute maximum ratings

Symbol	Parameter	Min	Max	Unit
T _{STG}	Storage temp	-40	125	°C
T _{OP}	Operating temp	-40	125	°C
M _{max}	Gain (I _{p0} = 1 nA)	200		
I _{PEAK}	Peak DC current		0.25	mA

Spectral response (M = 100)

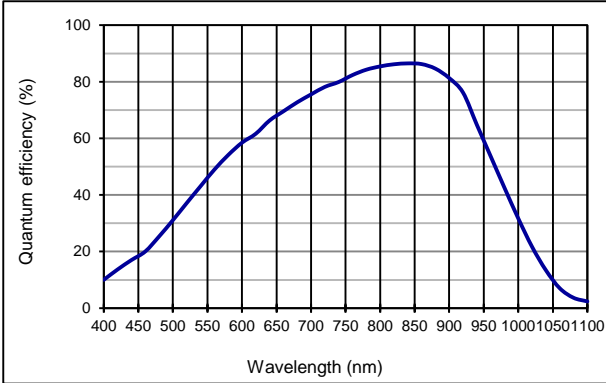


Electro-optical characteristics @ 23 °C

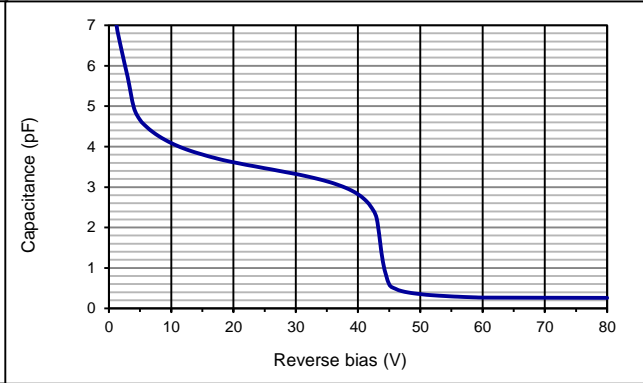
Symbol	Characteristic	Test Condition	Min	Typ	Max	Unit
	No of elements		64			
	Chip size		5260 x 2010			µm
	Active area	per element	236 x 236			µm
	Gap; Pitch		64 ; 300			µm
I _D	Dark current	M = 100, per element		0.5	1	nA
C	Capacitance	M = 100, per element		0.4		pF
	Responsivity	M = 100, λ = 905 nm	52	58	60	A/W
t _R	Rise time	M = 100 V; λ = 905 nm; R _L = 50 Ω		0.6		ns
V _{BR}	Breakdown voltage	I _R = 10 µA	160	200	240	V
	Cross talk	DC, λ = 905 nm		59		dB
	Temperature coefficient		1.25		1.55	V/K
	Photo current uniformity			tbd		

Preliminary for A - samples

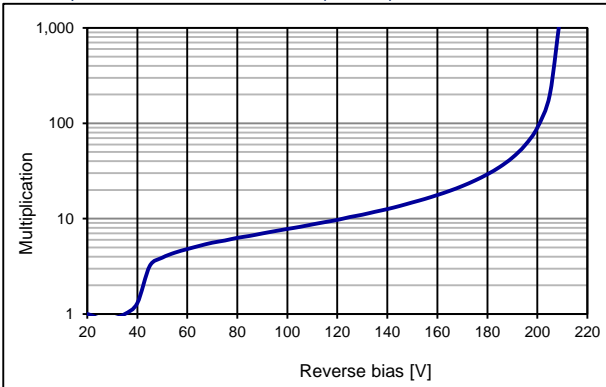
Quantum efficiency (23 °C)



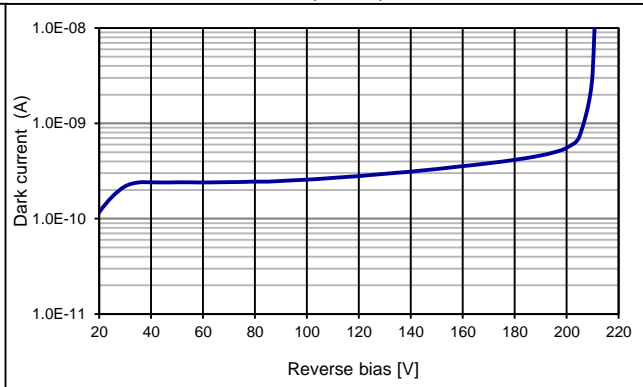
Capacitance as fct of reverse bias (23 °C)



Multiplication as fct of bias (23 °C)



Dark current as fct of bias (23 °C)



Handling:

Please refer to document "Instructions for handling and processing"