

1300/1550nm 1~4 Gbps InGaAs PIN Photodiodes Array

Part number: **PY-CKmn**
mxn array available (m,n=1,2,3..9,A,B,C,D,...)

Features:

- extremely low dark current, capacitance, and excellent responsivity
- *mxn* array available
- two top contacts on Si. substrate
- 250 μm array pitch, and uniform channel to channel characteristics
- extremely low electrical and optical crosstalk attenuation

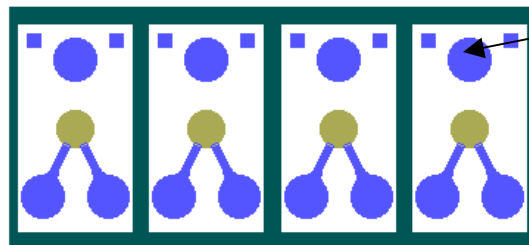
Characteristics (T=300K)

	Conditions	Min.	Typical	Max.	Unit	Notes
Bandwidth	-3 V	3			GHz	
Wavelength range		910	1310	1650	nm	
Responsivity		0.8	0.85	.95	A/W	@1310nm
Responsivity variation			2	3	%	<i>m=1, n$\leq$12</i>
Dark current	-3 V		5	10	nA	
Reverse breakdown	1 μA	30			V	
Capacitance	- 3 V, 1 MHz		0.40	0.55	pF	70 μm window
Rise/Fall time (20%/80%)				100	ps	

Physical

	Typical	Unit	Notes
Aperture (dia.)	70	μm	
Bonding pads (dia.)	80	μm	A-C-A-C-A-C..
Die height	150	μm	
Die size	(<i>m</i> x460)x(<i>n</i> x250)	μm^2	<i>m</i> : rows, <i>n</i> : columns
Substrate	S.I. substrate		

Device 1x4 array layout [μm]



Dummy pads for mechanical balance after flip-chip bonding

AXT Inc.
 2019 Saturn Street
 Monterey Park, California 91754
 Tel: 1-323-278-0820
 Fax: 1-323-278-0096
 Email: VCSEL@axt.com
www.axt.com

PY-CKmn Rev. B