

Standard 1~4 Gbps GaAs PIN Photodiodes Array

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

Features:

- 1-4 Gbps operation at -3 to 0 V
- Two top side wire-bond pads
- extremely low dark current, capacitance, and excellent responsivity
- mxn array available
- 250 μm array pitch, and uniform channel to channel characteristics
- extremely low electrical and optical crosstalk attenuation

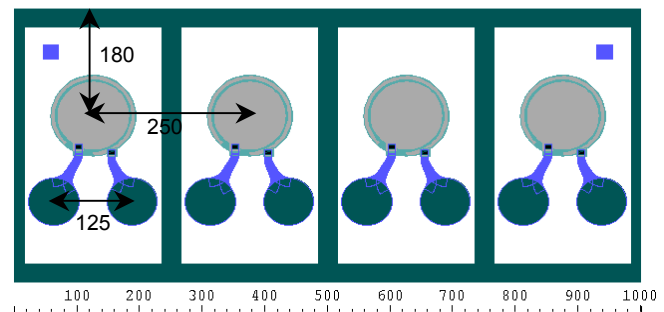
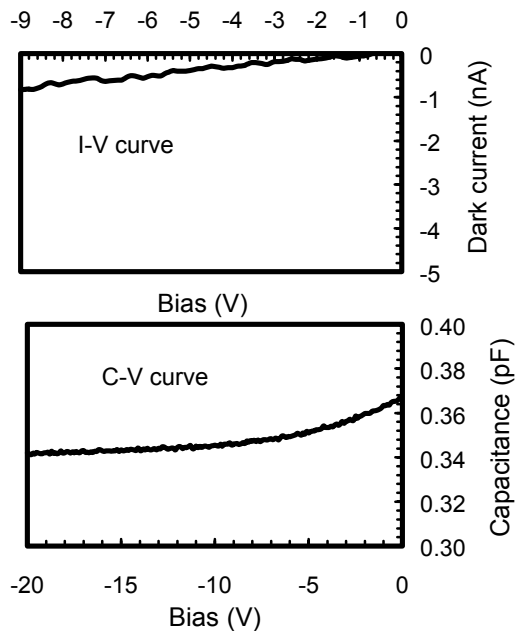
Characteristics (T=300K)

	Conditions	Min.	Typical	Max.	Unit	Notes
Bandwidth	-3V to 0V	4	6		GHz	
Wavelength Range	-1.6 V	780	850	860	nm	
Responsivity	-1.6 V	0.5	0.58		A/W	@850nm
Responsivity variation			2	3	%	m=1,n $\leq$ 12
Dark current	-1.6 V		0.1	1	nA	
Reverse breakdown	1 μA	30	50		V	
Capacitance	-3V to 0V		0.35	0.45	pf	
Rise/Fall time				100/100	ps	20%/80%

Physical

	Typical	Unit	Notes
Aperture (dia.)	100	μm	
Bonding pads (dia.)	80	μm	A-C...A-C order from left to right
Die height	150	μm	
Diode pitch	250	μm	
Array size	(mx460)x(nx250)	μm^2	m: rows, n: columns
Substrate	Semi-insulating substrate		

Device performance (at T=300K) and 1x4 array layout [μm]



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