



Planar InGaAs/InP Analog PIN PD with TFF, Top Illuminated
IPPDC-A

Feature

- Planar InGaAs/InP photodiode with TFF
- Top-illuminated
- High sensitivity
- Wavelength range: 1550nm to 1650nm
- Wide Operational Temperature Range $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Available as Chip

Applications

- Optical Access Network
- CATV

IPPDC-D Planar InGaAs/InP Analog PIN PD Chip Specifications @($T_{\text{chip}}=25^{\circ}\text{C}$)

Parameter	Symbol	Min	Max	Unit	Condition
Operating Wavelength	I_{RX}	1550	1650	nm	
Responsivity	R	0.9		A/W	I_{RX}
Capacitance	C_{PD}		0.8	pF	$V_r=5\text{V}$, $f=1\text{MHz}$
Cut-Off Frequency	$f_{3\text{dB}}$	2		GHz	$V_r=5\text{V}$, $R_L=50\text{W}$
Dark Current	I_{dark}		1	nA	$V_r=5\text{V}$, $T=25^{\circ}\text{C}$
			80	nA	$V_r=5\text{V}$, $T=85^{\circ}\text{C}$
Discrete Second Order Distortion Products	DSO		-70	dBc	$V_r=12\text{V}$, $R_L=50\text{W}$, $f_1=400\text{ MHz}$, $f_2=450\text{ MHz}$, Modulation Index=0.7, Input power=-3dBm
PIN Dimensions					Top-illuminated, 300umx300umx150um

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