

◆ **Introduction:**

S-10BCPD10-G is a front-side illuminated InGaAs PIN chip with a planar structure. This product has high responsivity, low dark current, and excellent reliability. It is ideally suited for low cost, high-speed data communication designs.

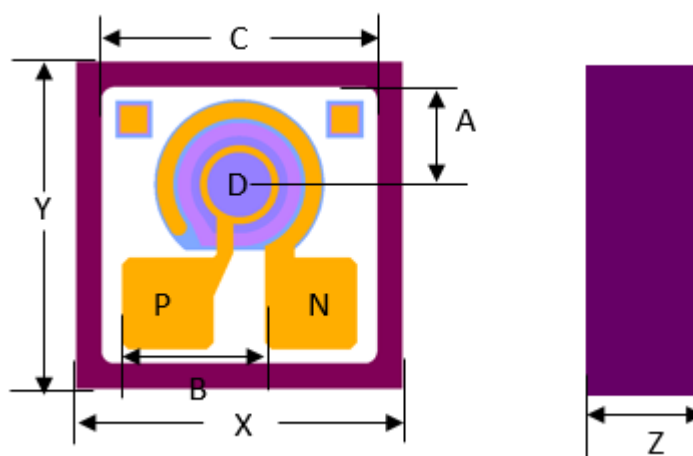
◆ **Key Features:**

- Topside anode & cathode configuration
- Operating temperature range:-40 to +85°C
- 100% testing and inspection
- RoHS complian

◆ **Applications:**

- GPON B+ (with super TIA)
- 10GBASE-LRM
- SONET/SDH OC-192
- 10Gigabit Ethernet
- 8G Fiber Channel
- ATM, CATV

◆ **Physical Parameters:**



	Die Dimension						Aperture	Pad	
Symbol	X	Y	Z	A	B	C	D	P	N
Min	225	225	135	70	100	200		65*65	65*65
Typ	250	250	150	75	110	210	Φ50	70*70	70*70
Max	275	275	165	80	120	220		75*75	75*75
Unit	μm	μm	μm	μm	μm	μm	μm	μm*μm	μm*μm

◆ **Absolute Maximum Rating:**

Parameter	Symbol	Rating		Unit
		Min	Max	
Operation Voltage	V_{OP}		5	V
Forward Current	I_F		5	mA
Reverse Current	I_R		3	mA
Operating Temperature	T_{OP}	-40	85	°C
Storage Temperature	T_S	-45	125	°C

◆ **Specifications (T=25°C) :**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Wavelength Range	λ		1250	1310/1550	1650	nm
Dark Current	I_D	$V_R=3V$			10	nA
Responsivity	R_e	$V_R=3V$ $\lambda=1550nm$	0.90	0.95		A/W
Capacitance	C	$V_R=3V$			0.30	pF
-3dB Bandwidth	BW	$V_R=3V$	8.0			GHz