

◆ **Introduction:**

S-14BCPD25-G is a bottom-illuminated InGaAs PIN chip with a backside integrated lens which strongly improves optical coupling tolerances. This product has high responsivity, low dark current, and excellent reliability. It is ideally suited for low cost, high-speed data communication designs.

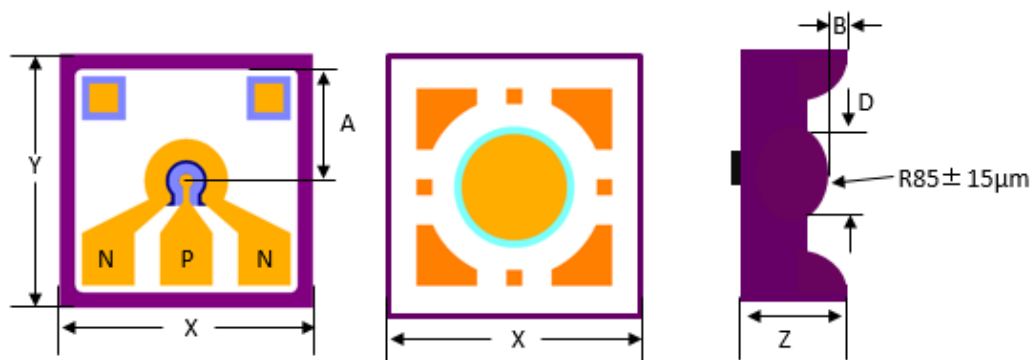
◆ **Key Features:**

- 20μm bottom-illuminated active area
- Integrated InP lens
- Top-sided coplanar GSG contact pads
- Operating temperature range:-40 to +85°C
- 100% testing and inspection
- RoHS compliant

◆ **Applications:**

- 25G Ethernet
- Single-mode datacom and telecom
- Fiber-optic transceivers, receivers, and transponders

◆ **Physical Parameters:**



	Die Dimension					Aperture	Pad	
Symbol	X	Y	Z	A	B	D	P	N
Min	315	315	135	145	2	90	65*65	65*65
Typ	340	340	150	150	5	100	70*70	70*70
Max	365	365	165	155	8	110	75*75	75*75
Unit	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	$I_R$		2	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	$\lambda$		1210	1310/1550	1650	nm
Dark Current	$I_D$	$V_R=5V$		1	10	nA
Responsivity	$R_e$	$V_R=3V$ $\lambda=1310nm$	0.7			A/W
Capacitance	C	$V_R=5V$			0.1	pF
-3dB Bandwidth	BW	$V_R=3V$ $\lambda=1310nm$	20			GHz