

◆ **Introduction:**

S-10ACPD02-D 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.

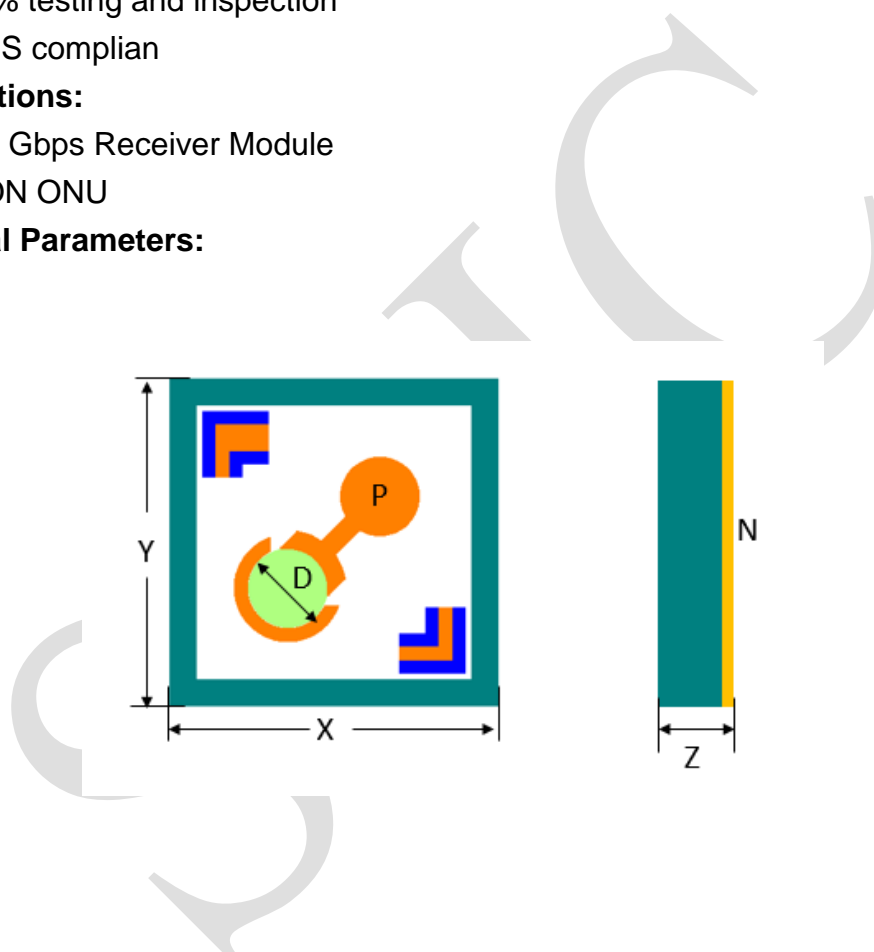
◆ **Key Features:**

- Optical aperture: 60μm
- Low capacitance: 0.6pF Max
- Backside common cathode and topside anode
- Operating temperature range:-40 to +85°C
- 100% testing and inspection
- RoHS complian

◆ **Applications:**

- 1.25 Gbps Receiver Module
- EPON ONU

◆ **Physical Parameters:**



	Die Dimension			Aperture	Pad
Symbol	X	Y	Z	D	P
Min	225	225	135	Φ55	Φ55
Typ	250	250	150	Φ60	Φ60
Max	275	275	165	Φ65	Φ65
Unit	μm	μm	μm	μm	μm

◆ **Absolute Maximum Rating:**

Parameter	Symbol	Rating		Unit
		Min	Max	
Operation Voltage	V_{OP}		20	V
Forward Current	I_F		10	mA
Reverse Current	I_R		5	mA
Operating Temperature	T_{OP}	-40	85	°C
Storage Temperature	T_C	-45	125	°C

◆ **Specifications (T=25°C) :**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Wavelength Range	λ		1210	1310/1550	1650	nm
Breakdown Voltage	V_{BR}	$I_D=10\mu A$	30			V
Dark Current	I_D	$V_R=5V$			0.5	nA
Responsivity	R_e	$V_R=5V$ $\lambda=1550nm$	0.90	0.95		A/W
Capacitance	C	$V_R=5V$			0.6	pF
-3dB Bandwidth	BW	$V_R=5V$ $\lambda=1550nm$	2.0			GHz