

◆ **Introduction:**

S-12AEPD08-G is an edge 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.

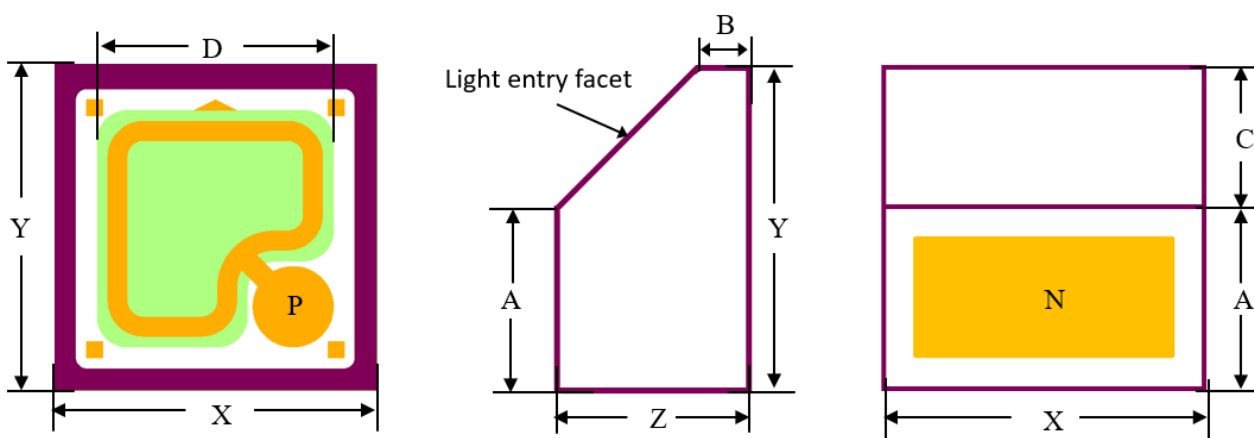
◆ **Key Features:**

- Edge illuminated
- Backside common cathode and topside anode
- Operating temperature range: -40 to +85°C
- 100% testing and inspection
- RoHS compliant

◆ **Applications:**

- Back facet laser power monitoring

◆ **Physical Parameters:**



Symbol	Die Dimension						Aperture	Pad	
	X	Y	Z	A	B	C		D	P
Min	275	275	165	160	40	120	215	Φ70	235×105
Typ	300	300	180	170	50	130	220	Φ75	240×110
Max	325	325	195	180	60	140	225	Φ80	245×115
Unit	μm	μm	μm	μm	μm	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	$V_R=5V$		0.1	0.5	nA
Responsivity	R_e	$V_R=5V$ $\lambda=1550nm$	0.30	0.50		A/W
Capacitance	C	$V_R=5V$		2.7	5.0	pF