

◆ **Introduction:**

S-15DMPD11-G is a front-side illuminated InGaAs PIN chip with a mesa structure. This product has high responsivity, low dark current, and excellent reliability. It is ideally suited for low cost, high-speed data communication designs.

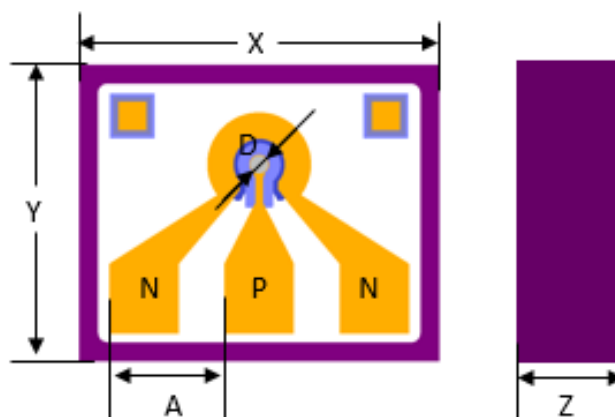
◆ **Key Features:**

- Optical aperture: 20μm
- Top-sided coplanar GSG contact pads
- Operating temperature range:-40 to +85°C
- 100% testing and inspection
- RoHS compliant

◆ **Applications:**

- IEEE 100 Gigabit Ethernet

◆ **Physical Parameters:**



Symbol	Die Dimension				Aperture	Pad	
	X	Y	Z	A		P	N
Min	365	295	135	115		70*70	70*70
Typ	390	320	150	125	Φ20	75*75	75*75
Max	415	345	165	135		80*80	80*80
Unit	μm	μm	μm	μm	μm	μm*μm	μm*μm

◆ **Absolute Maximum Rating:**

Parameter	Symbol	Rating		Unit
		Min	Max	
Operation Voltage	V _{OP}		5	V
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
Dark Current	I _D	V _R =3V		1	10	nA
Responsivity	R _e	V _R =3V λ =1310nm	0.7	0.75		A/W
Capacitance	C	V _R =3V			0.1	pF
-3dB Bandwidth	BW	V _R =5V λ =1310nm	20			GHz