

**OD8121N****1310 nm SMT PIN Photo Diode Module with Single Mode Fiber****GENERAL DESCRIPTION**

The OD8121N surface mount type PIN-PD module is a 1.3  $\mu\text{m}$ , InGaAs PIN photo diode coupled to a single mode fiber with a pigtail. It is designed for STM-1 L-1.1 (OC-3 LR-1).

**ABSOLUTE MAXIMUM RATINGS**

(Ta = 25°C, unless otherwise noted)

Parameter	Symbol	Rating	Unit
Supply Voltage	VR	20	V
Forward Current	IF	10	mA
Optical Input Power	Pomax	5	mW
Operating Temperature	Ta	-40 to +85	°C
Storage Temperature	Tstg	-40 to +85	°C
Lead Soldering Temperature (10 sec)	Tsid	260	°C

**OPTICAL AND ELECTRICAL CHARACTERISTICS**

(Ta = -40 to 85°C, unless otherwise specified)

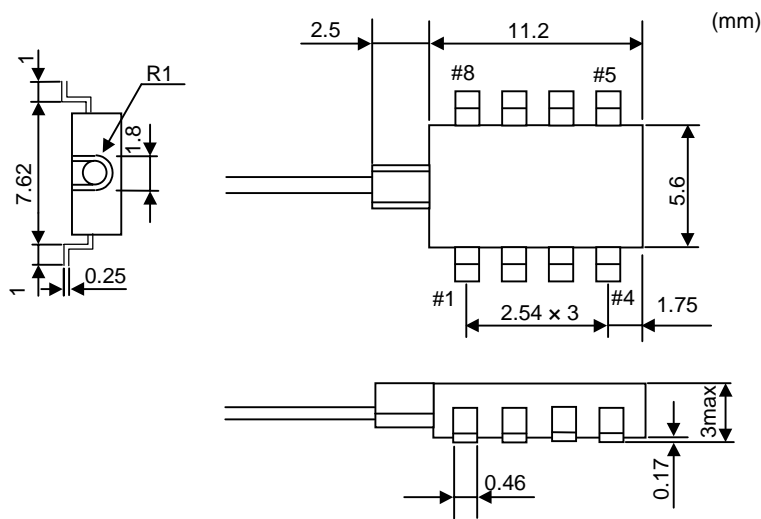
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Responsivity	R	VR = 5 V, $\lambda$ = 1310 nm	0.7	0.8	—	A/W
Dark Current	Id	VR = 5 V, Pin = 0	—	—	1	nA
Bandwidth	BW	VR = 5 V, $\lambda$ = 1310 nm RL = 50 ohm, -3 dB	1	—	—	GHz
Terminal Capacitance	Ct	VR = 5 V, f = 1 MHz	—	—	1.8	pF
Return Loss	RI	$\lambda$ = 1310 nm	—	—	-27	dB

**CONNECTOR AND FIBER SPECIFICATIONS**

Parameter	Specifications	Unit
Type	SM	—
Mode Field Diameter	9 ±1	μm
Code Diameter	0.9	mm
Bending Radius	20 (min)	mm
Length	Options	—
Connector	FC, SC, MUJ, etc.	—
Color	Dark Blue	—

**OUTLINE DRAWING**

All dimensions in millimeters  
 Package No. (Unit: mm)



**PIN DESCRIPTIONS**

No.	FUNCTION
1	NC
2	PD CATHODE
3	PD CATHODE
4	NC
5	NC
6	PD ANODE
7	NC
8	CASE GROUND

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