

OL3301N-05**1310 nm/0.5 mW SMT Laser Diode Module with Single Mode Fiber****GENERAL DESCRIPTION**

The OL3301N-05 surface mount type LD module is a 1.3 μ m, InGaAsP/InP F-P laser diode coupled to a single mode fiber with a pigtail. It is designed for STM-16 I-16.

ABSOLUTE MAXIMUM RATINGS

(Ta = 25°C, unless otherwise noted)

Parameter	Symbol	Rating	Unit
Fiber Output Power	PF	2	mW
Laser Diode Reverse Voltage	VR (LD)	2	V
Photo Diode Forward Current	IF	10	mA
Photo Diode Forward Voltage	VR (PD)	15	V
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
Fiber Output Power	PF	CW	0.5	—	—	mW
Threshold Current	I _{th}	—	—	—	40	mA
Center Wavelength	λ_c	Pf = 0.5 mW, RMS Ta = -40 to 85°C	1270	—	1360	nm
Spectral Width	σ	Pf = 0.5 mW, RMS (σ)	—	—	4	nm
LD Forward Voltage	V _F	Pf = 0.5 mW	—	—	1.5	V
Rise and Fall Time	t _r , t _f	10 to 90%	—	—	0.15	ns
Monitor Current	I _m	Pf = 0.5 mW	200	—	1000	μ A
Input Impedance	Z _{in}	—	—	25	—	Ω
Tracking Error	E _r	I _m = const. @ Pf = 0.5 mW (25°C)	—	—	1.0	dB

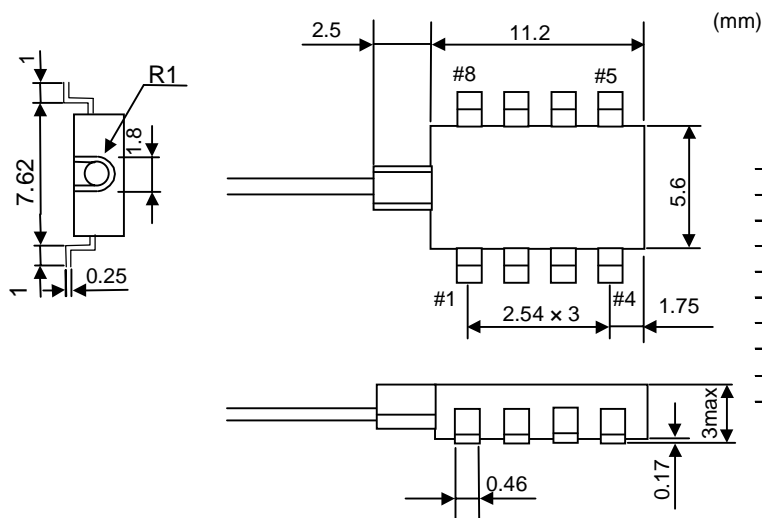
CONNECTOR AND FIBER SPECIFICATIONS

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	Yellow	—

OUTLINE DRAWING

All dimensions in millimeters

Package No. (Unit: mm)



PIN DESCRIPTIONS

No.	FUNCTION
1	NC
2	CASE GROUND
3	LD DC BIAS CATHODE
4	PD CATHODE
5	PD ANODE
6	LD ANODE
7	LD RF INPUT CATHODE, 25Ω
8	CALD ANODE

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