

1310nm 25Gbps DFB Laser LC(w/o XMD) TOSA with Flex (Preliminary)

L-AT-ID31-09

TYPE NAME: L-AT-ID31-09

Product Description:

This Luxnet L-AT-ID31-09 5pin 25Gbps DFB Laser LC-TOSA (Transmitter Optical Sub Assembly) is designed for 25Gbps fiber optic data communication. The application requirements are used to perform through single mode optical fiber. A flex provides to interconnect from header, which leads to transceiver PCB with control impedance. The device integrates DFB Laser diode with InGaAs PD as laser power monitor which located in the To-can. The product contains low threshold current.

Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Units	Min	Max	Note
Operating Temperature (case)	T _c	°C	-40	+85	
Storage Temperature	T _{stg}	°C	-40	+85	
Soldering Temperature (10 sec)	STEM	°C	-	260	
Laser Reverse Voltage	V _{RL}	V	-	2	
Laser Forward Current	I _{FL}	mA	-	100	
Photodiode Reverse Voltage	V _{RD}	V	-	15	
Photodiode Forward Current	I _{pd}	mA	-	10	

Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Units	Min	Typ	Max	Test condition
Threshold Current	I _{th}	mA	-	8	-	CW, T _c = 25°C, optical power 50uW.
			-	-	30	CW, T _c = 85°C, optical power 50uW.
Forward Voltage	V _f	V	-	-	2	CW, T _c = 25°C, I _{op} = I _{th} +30mA
Optical Output Power	SMF P _f	dBm	-1.9	-	+0.6	CW, T _c = 25°C, I _{op} = I _{th} +30mA
Peak Wavelength	λ	nm	1300	1310	1320	T _c = -40~85°C
Side Mode Suppression Ratio	SMSR	dB	35	-	-	T _c = 25°C, I _{op} = I _{th} +30mA Scan resolution <0.1nm
RMS	Δλ	nm	-	-	0.8	T _c = -40 ~ 85C
Tracking error	ΔP _f /P _f	dB	-1.5	-	+1.5	APC, -40~85°C
Optical Return Loss	ORL	dB	-	-	-30	λ= 1310 nm
Rise Time / Fall Time	τ _r /τ _f	ps	-	20	-	I _{op} = I _{th} +30mA 20-80%
Relative Intensity Noise	RIN	dB/Hz	-	130	-	I _{op} = I _{th} + 30mA 5 GHz – 26GHz

* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.0

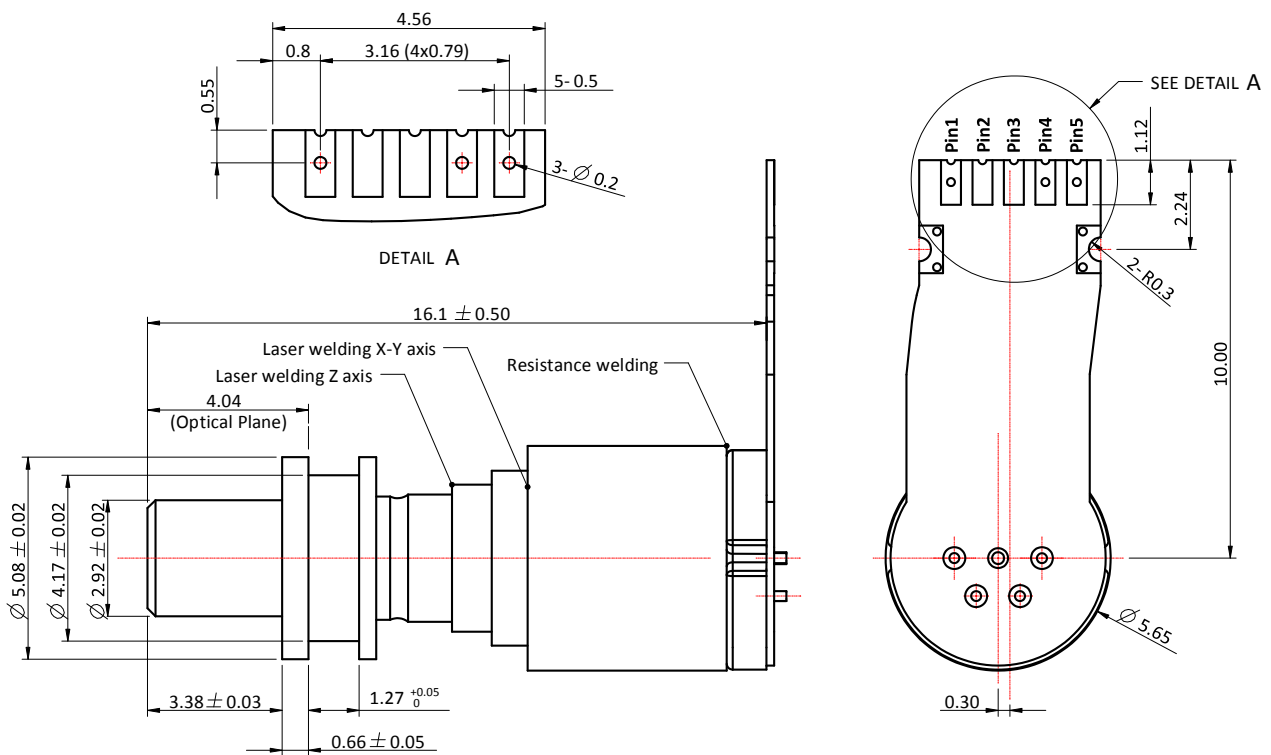
Photodiode Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Units	Min	Typ	Max	test condition
PD Monitor Current	I _{pd}	mA	0.1	-	-	CW, I _{op} = I _{th} +30mA
PD Dark Current	I _d	nA	-	-	100	V _r = 3.3V
PD Capacitance	C	pF	-	10	20	V _r = 5V @ 1MHz

L-AT-ID31-09 (LC-TOSA)

Dimensions: (mm)

All dimensions are nominal



Note : Receptacle is electrical Isolated from TO-Header GND pin.

Flex Board PINOUT (Bottom View)

L-AT-ID31-09	
Number	Function
Pin1	GND / PD+
Pin2	LD+
Pin3	LD-
Pin4	GND / PD+
Pin5	PD-

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