

25Gbps CWDM Laser TO (Preliminary)

L-TT-ICXX-04

TYPE NAME: L-TT-ICXX-04

Product Description:

The LuxNet L-TT-ICXX-04 TO-56 header assembly is designed for high speed, high performance data communication and telecommunication applications. This device is integrated with a 25Gbps CWDM laser, a TO-56 header, a monitoring photodiode, and an aspherical lens cap. This TO header assembly can be integrated with different types of ports that are engaged with a single mode fiber connector to provide good coupling efficiency as light generated by the CWDM laser is transmitted into a single mode fiber.

Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Units	Min	Max	Note
Operating Temperature (case)	T _c	°C	-40	+85	Case temperature
Storage Temperature	T _{stg}	°C	-40	+85	
Soldering Temperature (10 sec)	STEM	°C	-	260	5 seconds max.
Laser Reverse Voltage	V _{RL}	V	-	2	
Laser Forward Current	I _{FL}	mA	-	100	
Photodiode Reverse Voltage	V _{RD}	V	-	2	
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	
					30		CW, T _c = 85°C
Forward Voltage	V _f	V	-	-	2	CW, T _c = 25°C, I _{op} = 35mA	
Slope Efficiency	η	mW/mA	0.20			CW, T _c = 25°C, I _{th} + 10 mA to I _{th} +20 mA	
Fiber Coupling Power	P _f	mW		TBD		CW, T _c = 25°C, I _{op} = 35mA	
Peak Wavelength	L-TT-IC27-04	λ	nm	1264.5	1271	1277.5	T _c = -40 ~ 85°C
	L-TT-IC29-04			1284.5	1291	1297.5	
	L-TT-IC31-04			1304.5	1311	1317.5	
	L-TT-IC33-04			1324.5	1331	1337.5	
Side Mode Suppression Ratio	SMSR	dB	30			T _c = 25°C, I _{op} = 35mA Scan resolution <0.1nm	
Focal Point of Fiber Coupling	D _f	mm	(9.6)	10.1	(10.6)	CW, maximum coupling to SMF (9/125), PC fiber without theta alignment	

* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.0

Rise Time / Fall Time	τ_r/τ_f	ps	-	20/20	$I_{op} = 35mA$ 20-80%
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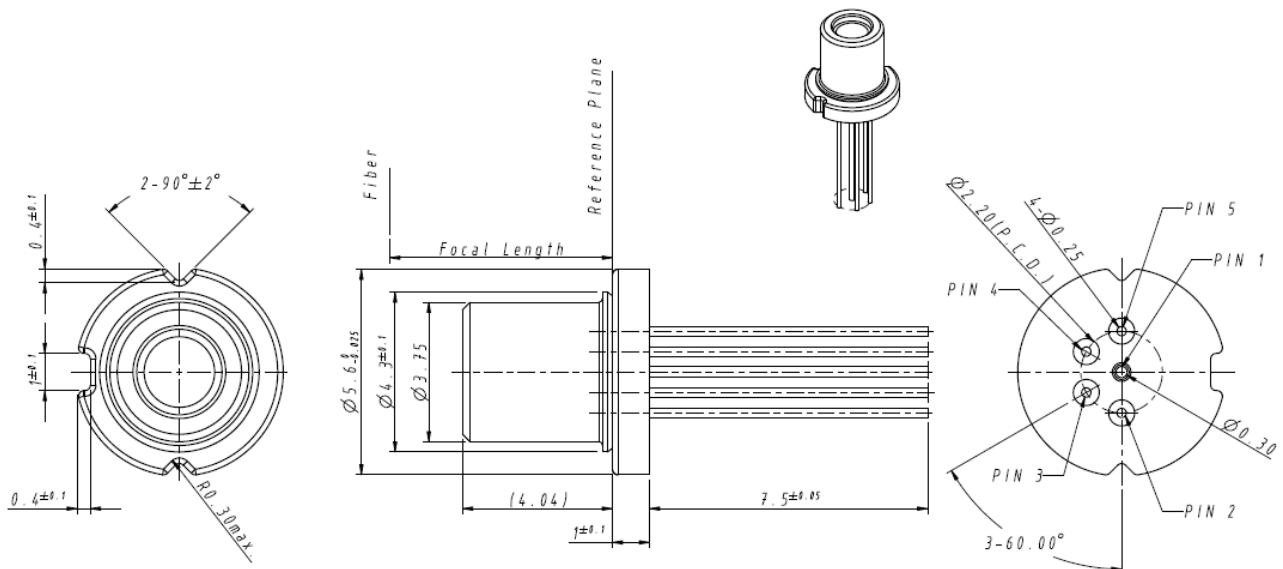
Photodiode Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Units	Min	Typ	Max	test condition
PD Monitor Current	I_{pd}	mA	0.1	-	-	CW, $I_{op} = 35mA$
PD Dark Current	I_d	nA			100	$P_{oc} = 0, V_r = 1.7V$
PD Capacitance	C	pF		10	20	$V_r = 5V @ 1MHz$

L-TT-ICXX-04 (TO-can)

Dimensions: (mm)

All dimensions are nominal



Flex Board PINOUT (Bottom View)

L-TT-ICXX-ZZ	
Number	Function
Pin1	GND/ Photodiode Anode
Pin2	Laser Diode Cathode (LD-)
Pin3	Non-Connect
Pin4	Photodiode Cathode (PD-)
Pin5	Laser Diode Anode (LD+)

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1310nm 25Gbps DFB Laser TO (Preliminary)

Notice

Version	Date	Status	Description	Signature