

## 850nm 25Gbps VCSEL LC TOSA with Flex (Preliminary)

### L-AT-IV08-00 Series

#### TYPE NAME: L-AT-IV08-00

#### Product Description:

The LuxNet L-AT-IV08-00 TOSA (Transmitter Optical Subassembly) is designed for a high-speed, high-performance TOSA data communication and Fiber channel applications. This device is integrated with an 850nm VCSEL, 7pin TO header, and plastic lens port and flex. The product is designed for 25Gbps application, transceiver modules and systems. The TO-can can be integrated with different types of ports that are engaged with a fiber connector to provide good coupling efficiency as light generated by the VCSEL is transmitted into multimode fiber.

#### Product Specifications:

##### Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	$T_{op}$	°C	-5	75	
Storage Temperature	$T_{stg}$	°C	-40	85	
Soldering Temperature	$T_s$	°C	-	260	10 seconds max.
Peak Forward Current	$I_{max}$	mA	-	12	
VCSEL Reverse Voltage	$V_r$	V	-	5	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Threshold Current	$I_{th}$	mA	-	0.7	1.2	
			-	-	1.6	$T_c=70^\circ\text{C}$
Forward Voltage	$V_f$	V	-	-	2.5	$I_{op}=6.5\text{mA}$
Differential Series Resistance	$R_s$	$\Omega$	-	-	120	$I_{op}=6.5\text{mA}$
Peak Wavelength	$\lambda_p$	nm	840	850	860	$I_{op}=6.5\text{mA}$
Spectral bandwidth (RMS)	$\Delta\lambda$	nm	-	-	0.6	$I_{op}=6.5\text{mA}$
Rise Time / Fall Time	$\tau_r/\tau_f$	ps	-	20		$I_{op}=6.5\text{mA}$ 20-80%
Peak Fiber Coupled Optical Power	$P_{oc}$	$\mu\text{W}$	500	800	1200	$I_{op}=6.5\text{mA peak}$ , 50/125 $\mu\text{m}$ fiber

\* Specifications are subject to change without notice.

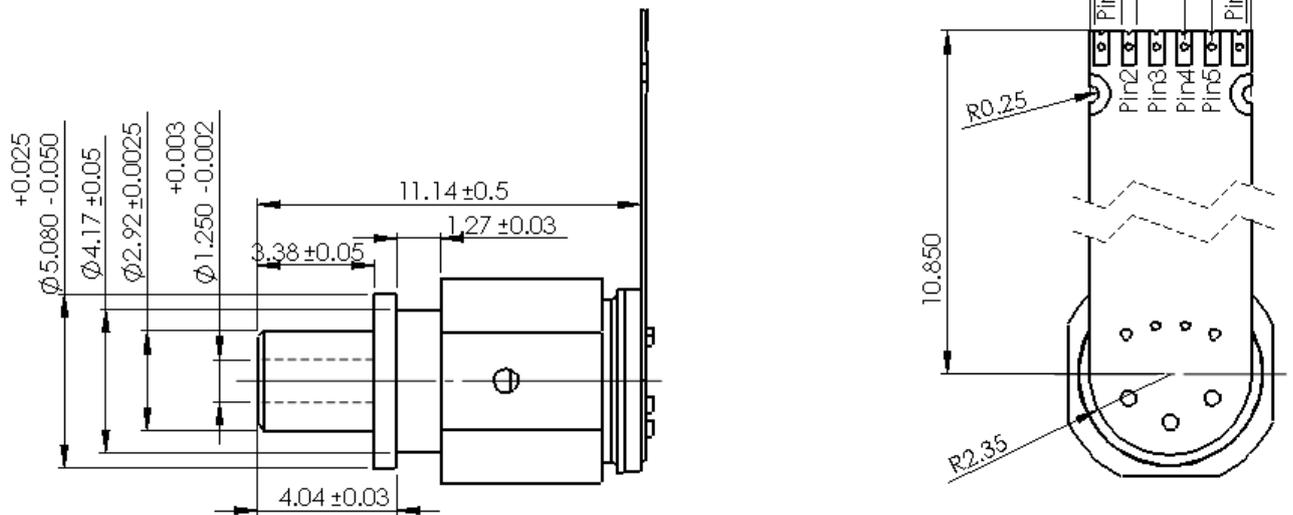
\* Screening per customer-specified reject limits is available.

Version 1.0

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

Parameter	Symbol	Unit	Min	Typ	Max	Test Condition
Monitor Current	$I_{pd}$	mA	0.1		0.8	@6.5mA @ 25°C
Dark Current	$I_d$	nA	-	-	6	$V_r = 40 @ 25^\circ C$
PD Capacitance	C	pF	-	20	-	$V_r = 5V @ 1MHz$

## L-AT-IV08-00 (LC-TOSA)

**Dimensions: (mm)**
*All dimensions are nominal*


Flex Board PINOUT (Bottom View)

L-AT-IV08-00	
Number	Function
Pin1	PD+
Pin2	GND
Pin3	LD+
Pin4	LD-
Pin5	GND
Pin6	PD-

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