



TLC-P85A646-10

High Speed 10Gb/s 850nm VCSEL LC-TOSA with FPC

Description

The Lasermate TLC-P85A646-10 is an 850nm wavelength, Vertical Cavity Surface Emitting Laser (VCSEL) LC-TOSA with flexible circuit designed for use in 10Gbps data rate operation.



Features

- LC-type optical sub-module with flexible circuit attached.
- Optimized for fiber optic application.
- Support up to 10.3125Gbps data rate operation.
- Isolated pinout between LD and monitor PD.
- Operating temperature -10 to 85 °C

Applications

- 10G BASE-SR

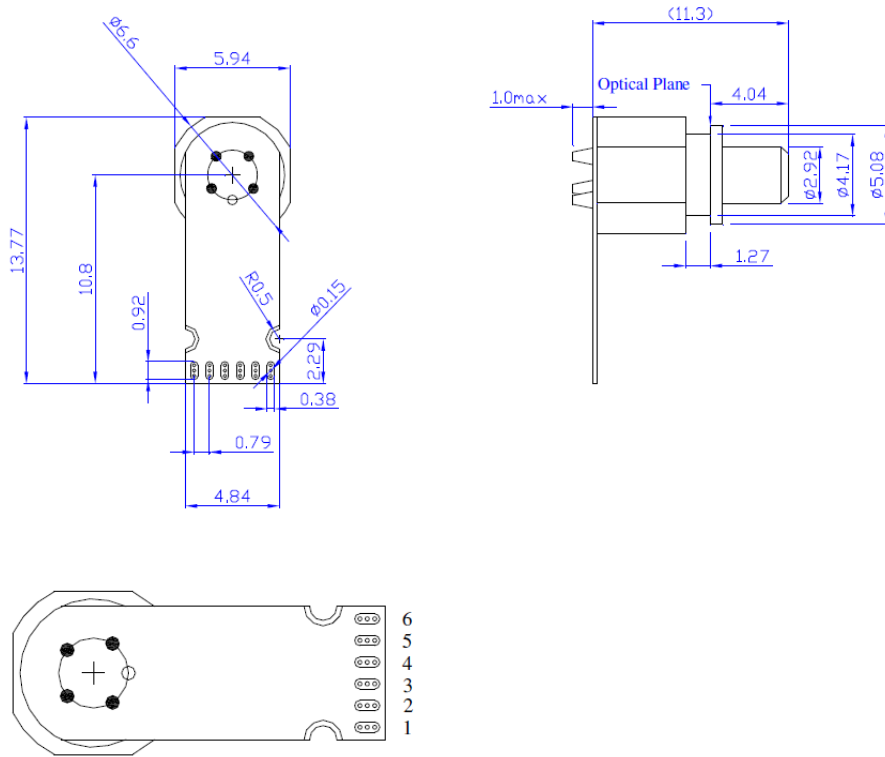
Specifications

Absolute Maximum Ratings				
Parameters	Min.	Max.	Unit	Conditions
Storage Temperature	-40	100	°C	
Operating Temperature	-10	85	°C	
Lead Solder Temperature		260	°C	10 seconds
Continuous Forward Current		10	mA	
Continuous Reverse Voltage		10	V	

Electro-Optical Characteristics (CW @ T=25°C unless otherwise specified)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I_{th}		1.0	1.5	mA	CW
Slope Efficiency	η	0.09		0.2	mW/mA	$I_F=6$ mA
Wavelength	λ_P	840	850	860	nm	$I_F=6$ mA
Forward Voltage	V_F	1.6	1.8	2.4	V	$I_F=6$ mA
Rise Time / Fall Time	T_r / T_f		50		ps	$I_F=6$ mA, ER= 5 dB
Spectral width (RMS)	$\Delta\lambda$			0.45	nm	$I_F=6$ mA, RMS, CW
Monitor Current	I_M	30			uA	$V_R=5$ V, $P_{OC}=600$ uW, CW

Note: All parameters are measured with MM 62.5/125um fiber.

Outline Dimensions (unit: mm)



Pin Configuration

Number	Function
1	PD Cathode
2	Case / Gnd
3	VCSEL Anode
4	VCSEL Cathode
5	Case / Gnd
6	PD Anode

Note: Specifications are subject to change without notice.