



T85V-P-LCLC0

1.25Gbps 850nm 0.2mW VCSEL Pigtail Module with LC/PC Connector

Description

The Lasermate T85V-P-LCLC0 is an 850nm wavelength, Vertical Cavity Surface Emitting Laser (VCSEL) pigtailed with LC/PC connector designed for use in 1.25Gbps data rate operation.



Features

- Industry standard LC/PC connector
- Aligned for multi-mode fiber (62.5um) communication
- With monitor PD
- High performance of noise and jitter characteristics
- Data rate operation from DC to 1.25Gbps

Applications

- 1.25Gbps data rate application

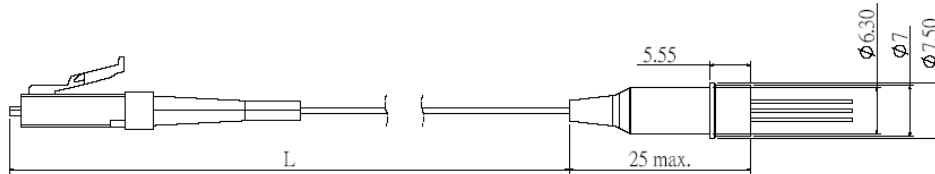
Specifications

Absolute Maximum Ratings			
Parameters	Symbol	Value	Unit
Storage temperature	Tstg	-40 to +85	°C
Operating case temperature	Top	0 to +70	°C
Peak optical output power	P _o	5	mW
Forward current (LD)	I _{FLD}	12	mA
Reverse voltage (LD)	V _{RLD}	5	V
Soldering temperature	Stemp	260	°C
Soldering time	Stime	10	sec

Electro-Optical Characteristics (CW at Tc=25°C, unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Threshold Current	I _{th}		2	3.5	mA	
Output Power	P _o	0.2			mW	I _F =6mA
Central Wavelength	λ _c	830	850	860	nm	CW, I _F =6mA
Spectral Bandwidth (RMS)	Δλ			0.85	nm	CW, I _F =6mA
Relative Intensity Noise	RIN		-130	-122	db/Hz	I _F =6mA, f= 1GHz
Rise/Fall Time	t _r /t _f		150/200		ps	I _b = I _{th} , 20%-80%
Forward Voltage	V _F	1.7	1.9	2.2	V	I _F =6mA
Breakdown Voltage	V _{BD}	5	14		V	IR=10uA
Series Resistance	R _S	30	45	65	Ohm	
Monitor Current	I _M		50		μA	

Outline Dimensions (unit: mm)

Pigtailed TOSA



Pin Configuration

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

Additional Notes

- For eye safety, ensure to avoid human eyes or skin exposure to laser beam. Do not look directly into the laser diode or the collimated laser beam when the device is activated.
- The component should be handled in the same manner as ordinary semiconductor devices to prevent electro-static damages (ESD). For safekeeping and carrying, the component should be packaged with ESD proof material. To assemble the component on PCB, the workbench, soldering iron and human body should be grounded.
- Operation-Conditions beyond Absolute Maximum Ratings may cause permanent damage to the device and affect the lifetime and reliability of product.
- Specifications are subject to change without notice.