



T13D-R-LCMD-I-10G

10Gbps 1310nm DFB Laser Diode Receptacle LC TOSA

Description

The Lasermate T13D-R-LCMD-I-10G is a 1310nm wavelength, MQW-DFB laser diode with LC TOSA package. The laser is suitable for use in 10Gbps data rate operation.



Features

- 1310nm MQW-DFB laser diode (LD)
- Built-in monitor PIN photodiode (PD)
- Uncooled, hermetically sealed
- Low threshold current
- LC TOSA package
- With isolator

Applications

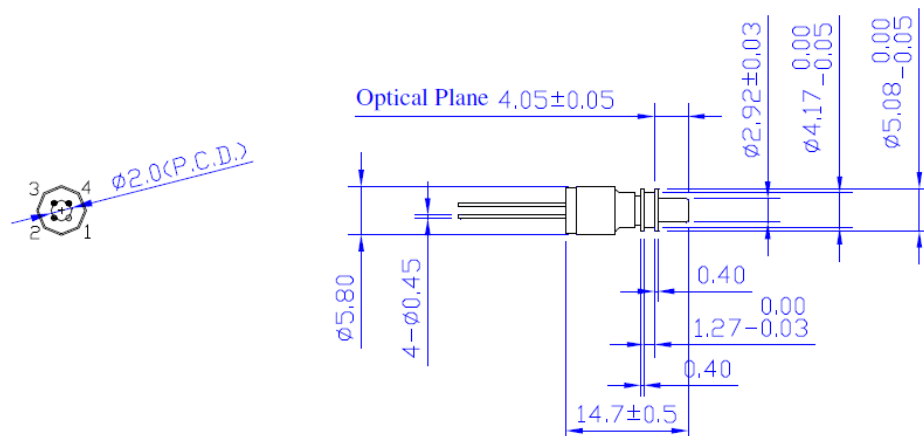
- 10G BASE-LR
- 10G Fiber Channel

Specifications

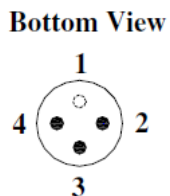
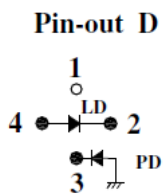
Absolute Maximum Ratings				
Parameters	Symbol	Value	Unit	Conditions
Storage temperature	Tstg	-40 to +85	°C	
Operating case temperature	Top	-40 to +85	°C	
Reverse voltage (LD)	V _{RL}	2	V	
Forward current (PD)	I _{FP}	2	mA	
Reverse voltage (PD)	V _{RP}	20	V	
Soldering temperature	S _{temp}	260	°C	10 seconds

Electro-Optical Characteristics (CW @ T _c = 25°C unless otherwise noted)						
Parameters	Symbol	Min.	Typ.	Max.	Unit	Conditions
Central wavelength	λ_c	1300	-	1320	nm	CW, Pf=0.7mW
Side mode suppression ratio	SMSR	30	-	-	dB	CW, I _{th} +20mA
Threshold current	I _{th}	-	10	15	mA	CW
Fiber output power	Pf	0.25	-	0.75	mW	CW, I _{th} +20mA
Slope efficiency	SE	0.01	-	0.03	W/A	CW
Operating voltage	V _{op}	-	-	1.5	V	CW, I _{th} +20mA
Rise time	T _r	-	50	-	ps	I _b = I _{th} , 20%~80%
Fall time	T _f	-	50	-	ps	I _b = I _{th} , 20%~80%
Monitor current	I _m	100	-	-	uA	CW, I _{th} +20mA
Tracking error	$\Delta Pf/ Pf$	-	±1.5	-	dB	APC, T _c =-40~+85°C

Outline Dimensions (unit: mm)



Pin Assignment



Note: Specifications are subject to change without notice.