Preliminary

FTR-01F-3L4-301

2.5Gbps LC Connectorized 1310nm FP Laser Diode

FEATURES:

- Pre-aligned LC-type receptacle for optical fiber communication.
- Design for Small Form Factor transceivers.
- Low threshold current and low operating current.
- Support from DC to 2.5Gbps data rate operation.

ELECTRO-OPTICAL CHARACTERISTICS: (T_A = 25°C, unless otherwise specified)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		10	15	mA	CW
Forward Voltage	V_F		1.1	1.6	V	CW, I_F=Ith+20mA
Slope Efficiency	η	0.023		0.045	mW/mA	CW, I_F=Ith+20mA
		0.015				T_A= -40~85°C
Rise / Fall time(20%~80%)	tr/tf			150	ps	I_F=Ith+20mA
Wavelength	λ_P	1290	1310	1330	nm	CW, I_F=Ith+20mA
		1260		1355		CW, T_A= -40~85°C
Spectral width(RMS)	△λ			3	nm	CW, I_F=Ith+20mA (RMS, -20dB)
PD Monitor Current	I_M	100		800	μA	CW,I_F=Ith+20mA,V_R=1V
PD Dark Current	I_D			0.1	μA	V_R=5V
PD Capacitance	C_M		3	10	pF	V_R=5V, f=1MHz
Tracking Error	TE	-1.5		1.5	dB	I_M hold@Ith+20mA(25°C) T_A= -40~85°C
Return Loss	RL	14			dB	

ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	85	°C	
Operating Temperature	-40	85	°C	
Lead Solder Temperature		260	°C	10 seconds
LD Reverse Voltage		2	V	
PD Reverse Voltage		20	V	
PD Forward Current		2	mA	

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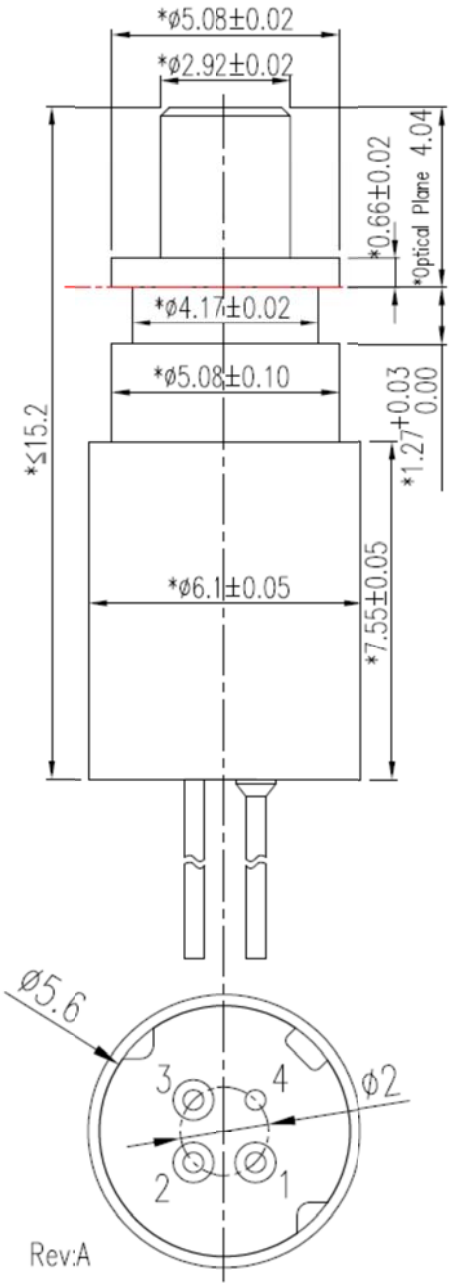
OUTLINE DIMENSIONS:

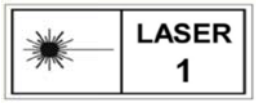
• Unit: mm
• With "*" mark are key dimensions



Pinout:

Pin no.	TTL-3G13-301
	Function
1	LD Cathode
2	PD Anode
3	LD Anode / PD Cathode
4	Case

The FP Laser is a class 1 laser in the safety standard IEC60825-1:2014.



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