



FTF-25D-3L8-390

25Gbps LC Connectorized 1310nm DFB Laser Diode with FPC

Preliminary

FEATURES:

- LC-type optical sub-module with flexible circuit attached.
- Low threshold current and low operating current.
- Support from DC up to 25.78Gbps data rate operation.
- Internal optical isolator.



ELECTRO-OPTICAL CHARACTERISTICS: ($T_A = 25^\circ\text{C}$, unless otherwise specified)

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}		6	11	mA	CW
			15	20		CW, $T_A = 85^\circ\text{C}$
Forward Voltage	V_F		1.5	2.0	V	CW, $I_F = I_{th} + 30\text{mA}$
Slope Efficiency	η	0.04			mW/mA	CW, $I_F = I_{th} + 30\text{mA}$
Optical Output Power	P_f	1.2			mW	CW, $I_F = I_{th} + 30\text{mA}$
Rise / Fall time(20%~80%)	tr/tf		20		ps	25Gbps, $I_F = I_{th} + 30\text{mA}$
Wavelength	λ_p	1300	1310	1320	nm	CW, $I_F = I_{th} + 30\text{mA}$
		1295		1325		CW, $T_A = -40 \sim 85^\circ\text{C}$
Side Mode Suppression Ratio	SMSR	35			nm	CW, $I_F = I_{th} + 30\text{mA}$
PD Monitor Current	I_m	100		1000	μA	CW, $I_F = I_{th} + 30\text{mA}$, $V_R = 1\text{V}$
PD Dark Current	I_d			0.1	μA	$V_R = 5\text{V}$
PD Capacitance	C_{MPD}		6	10	pF	$V_R = 5\text{V}$, $f = 1\text{MHz}$
Tracking Error	TE	-1.5		1.5	dB	$I_m \text{ hold@} I_{th} + 30\text{mA} (25^\circ\text{C})$ $T_A = -40 \sim 85^\circ\text{C}$
Return Loss	RL	20			dB	

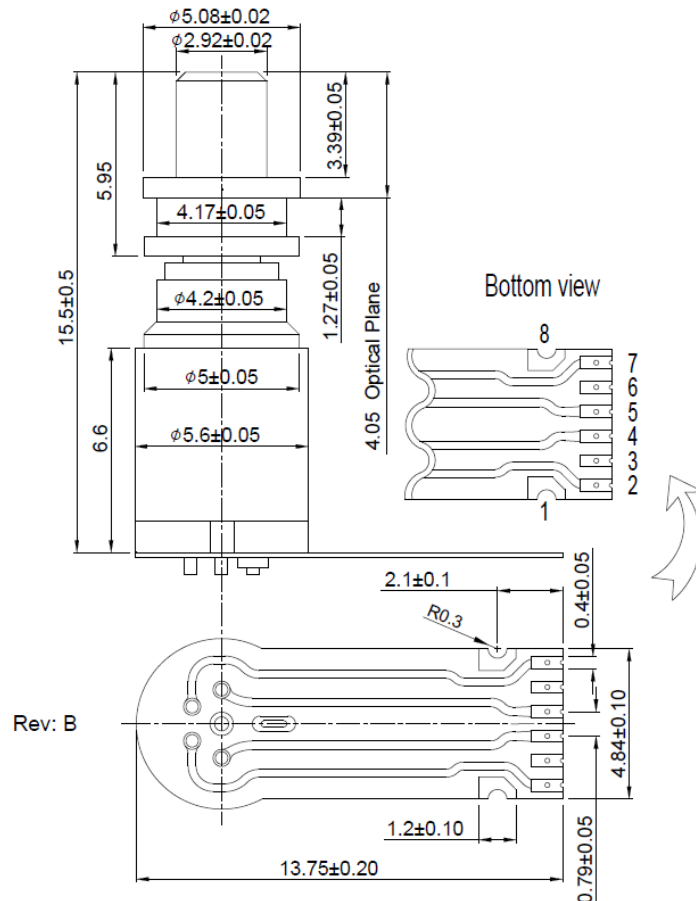
ABSOLUTE MAXIMUM RATINGS:

PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	85	$^\circ\text{C}$	
Operating Temperature	-40	85	$^\circ\text{C}$	
Lead Solder Temperature		260	$^\circ\text{C}$	10 seconds
Flex Attach Temperature		370	$^\circ\text{C}$	10 seconds
LD Reverse Voltage		2	V	
PD Reverse Voltage		20	V	
PD Forward Current		2	mA	



OUTLINE DIMENSIONS:

- Unit: mm



Pinout:

Pin no.	TLF-3G27-390
	Function
1	Gnd
2	PD Cathode
3	Gnd
4	LD Cathode
5	LD Anode
6	Gnd
7	PD Anode
8	Gnd

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

