

TTF-1F67-627

25Gbps LC Connectorized 850nm VCSEL plus Monitor PD with FPC

FEATURES:

- LC-type optical sub-module with flexible circuit attached.
- Support up to 25.78Gbps data rate operation.
- Isolated pinout.



ELECTRO-OPTICAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
Threshold Current	I_{th}			1.2	mA	$T_A = 25^\circ C$
Forward Voltage	V_F		2.2		V	$I_F = 6.5mA$
Slope Efficiency	η		0.14		mW/mA	$I_F = 6.5mA$
Series Resistance	R_s		115		Ω	$I_F = 6.5mA, T_A = 25^\circ C$
Wavelength	λ_p	840	850	860	nm	$I_F = 6.5mA$
Spectral width(RMS)	$\Delta\lambda$			0.65	nm	$I_F = 6.5mA, T_A = 0\sim 70^\circ C$
Relative Intensity Noise	RIN			-128	dB/Hz	$I_F = 6.5mA$
Monitor Current	I_M	100		1000	μA	$V_R = 5V, I_F = 6.5mA$
PD Dark Current	I_d			50	nA	$V_R = 5V, T_A = 25^\circ C$
PD Capacitance	C_M		12		pF	$V_R = 3V, f = 1MHz$

THERMAL CHARACTERISTICS:

PARAMETERS	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITIONS
η Temperature Coefficient	$\Delta\eta/\Delta T$		-0.35		%/ $^\circ C$	$T_A = 0\sim 70^\circ C, I_F = 6.5mA$
λ_p Temperature Coefficient	$\Delta\lambda/\Delta T$		0.06		nm/ $^\circ C$	$T_A = 0\sim 70^\circ C, I_F = 6.5mA$
Tracking Error	TE	-1.5		1.5	dB	$T_A = 0\sim 70^\circ C$

ABSOLUTE MAXIMUM RATINGS:

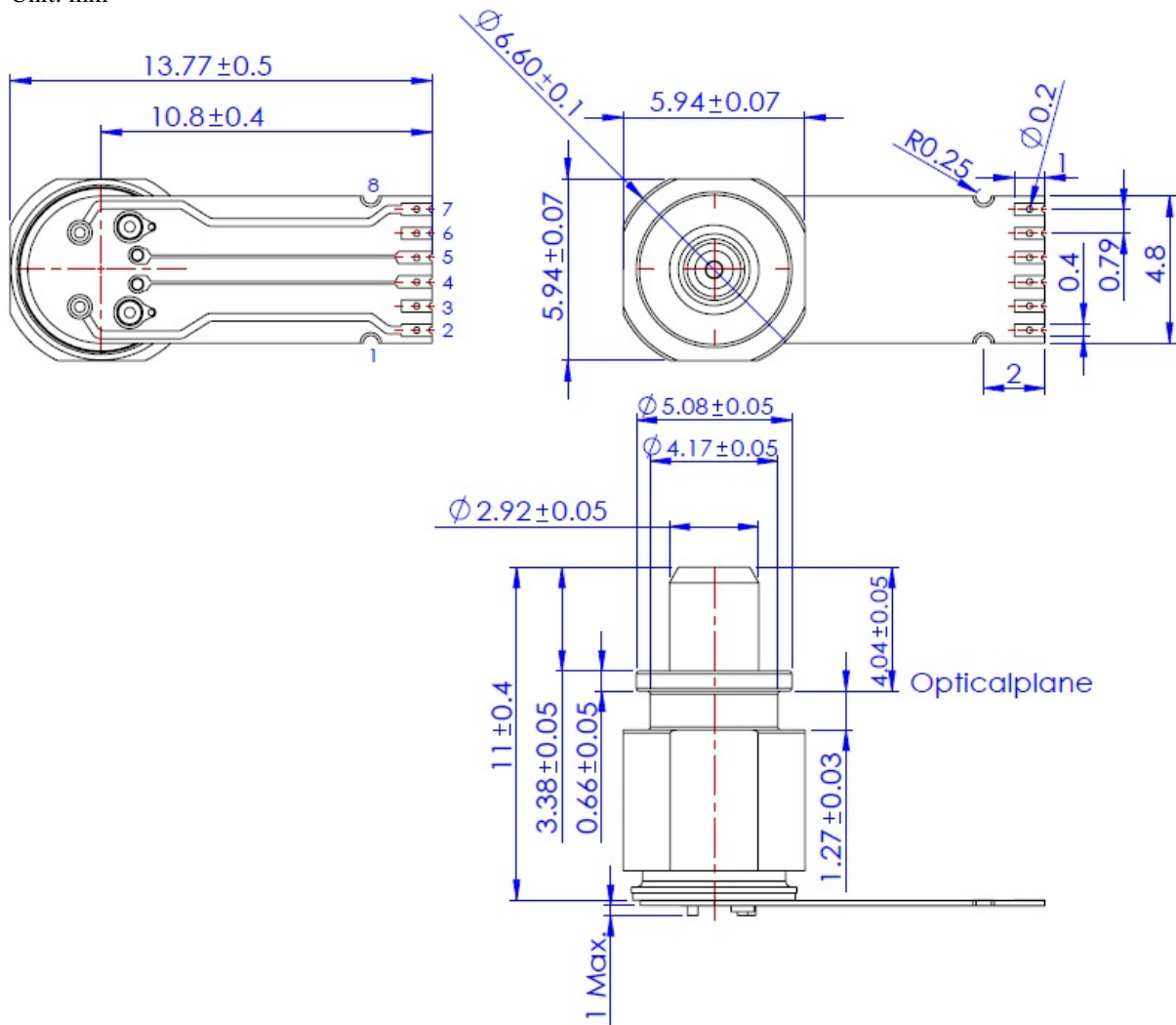
PARAMETERS	MIN	MAX	UNIT	TEST CONDITIONS
Storage Temperature	-40	85	$^\circ C$	
Operating Temperature	0	70	$^\circ C$	
Lead Solder Temperature		260	$^\circ C$	10 seconds
Peak Continuous Forward Current		12	mA	
Laser Reverse Voltage		5	V	

Contact

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OUTLINE DIMENSIONS:

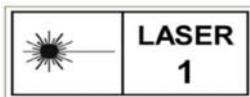
• Unit: mm



Pinout:

Pin Number	Function
1	GND
2	MPD Cathode
3	Case/Gnd
4	VCSEL Cathode
5	VCSEL Anode
6	Case/Gnd
7	MPD Anode
8	GND

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



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