

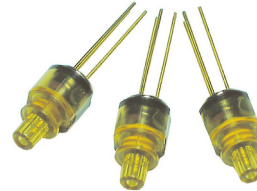
**Features**

- : Multi-mode 850nm VCSEL
- : 2.5Gbps data rates
- : Low drive current and voltage
- : Other configurations available on request

**Applications**

- : Data Communications
- : Ethernet
- : Fiber Channel

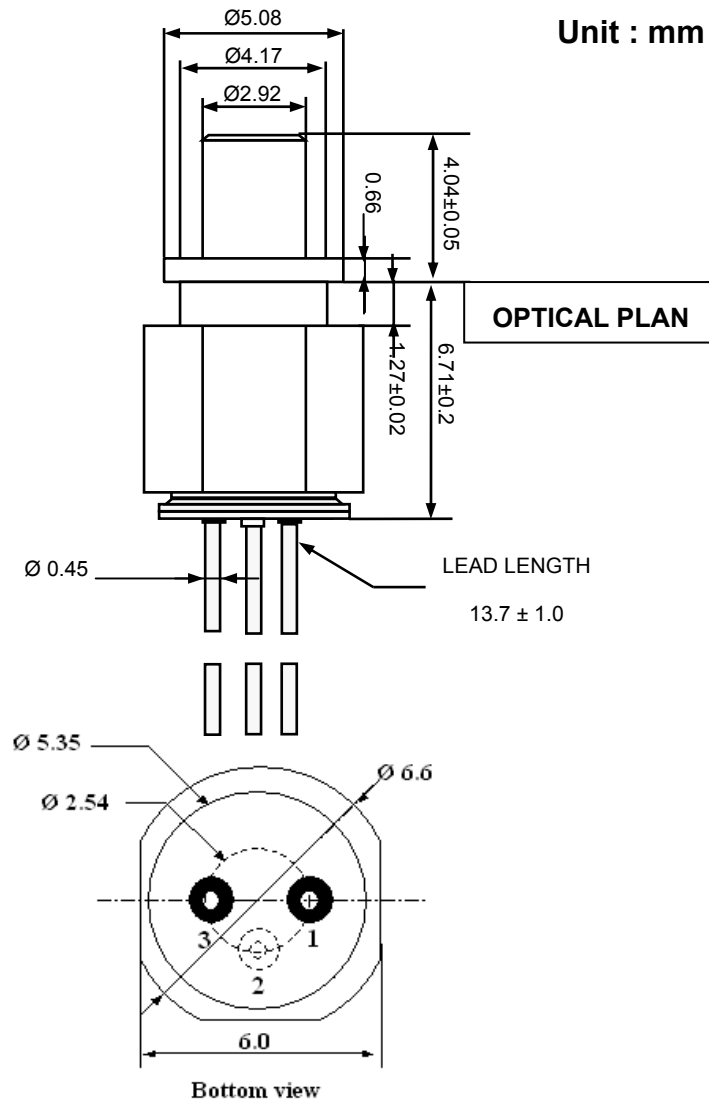
**Description**



**Absolute Maximum Ratings**

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	0 to 85 °C
Lead Solder Temperature	260 °C, 10 sec
Continuous Forward Current	12mA
Continuous Reverse Voltage	5V (@10µA)

Dimensions



**PIN OUT**

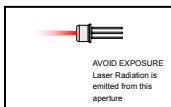
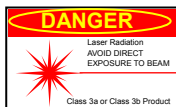
TP85-LCP0N	
Number	Function
1	A <sub>VCSEL</sub>
2	NC
3	K <sub>m-PD</sub>

Electro-Optics Characteristics (T<sub>a</sub>=25°C unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Peak Fiber Coupled Optical Output Power(See threshold current And slope efficiency which Control power output)	P <sub>oc</sub>		0.5		mW	I <sub>f</sub> = 6 mA, 62.5/125 μm fiber
Threshold Current	I <sub>th</sub>		1.5	3	mA	CW
I <sub>th</sub> Temperature Variation	ΔI <sub>th</sub>		1.5		mA	T <sub>a</sub> =0 to 85 °C
Slope Efficiency	η	0.04	0.1		W/A	I <sub>f</sub> = 6mA
η Temperature Variation	Δη / ΔT		-0.5		%/ °C	T <sub>a</sub> =0 to 85 °C at 6mA
Peak Wavelength	λ	840	850	860	nm	I <sub>f</sub> = 6mA
λ Temperature Variation	Δλ / ΔT		0.06			T <sub>a</sub> =0 to 85 °C at 6mA
Spectral Bandwidth (RMS)	Δλ			0.85	nm	I <sub>f</sub> = 6mA
Operating Voltage	V <sub>f</sub>		1.7	2.2	V	I <sub>f</sub> = 6mA
Breakdown Voltage	V <sub>b</sub>		-10		V	
Dynamic Resistance	R <sub>d</sub>	20	35	55	Ohm	I <sub>f</sub> = 6mA

Notes

\* These specifications are subject to change without notice



**NOTICE**

The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

**DANGER**

The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.