

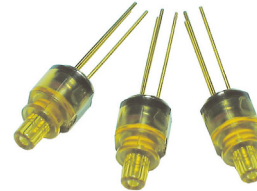
Features

- : High power VCSEL Package
- : 1Gbps data rates
- : Low drive current and voltage
- : Other configurations available on request

Applications

- : Data Communications
- : Ethernet
- : Fiber Channel

Description

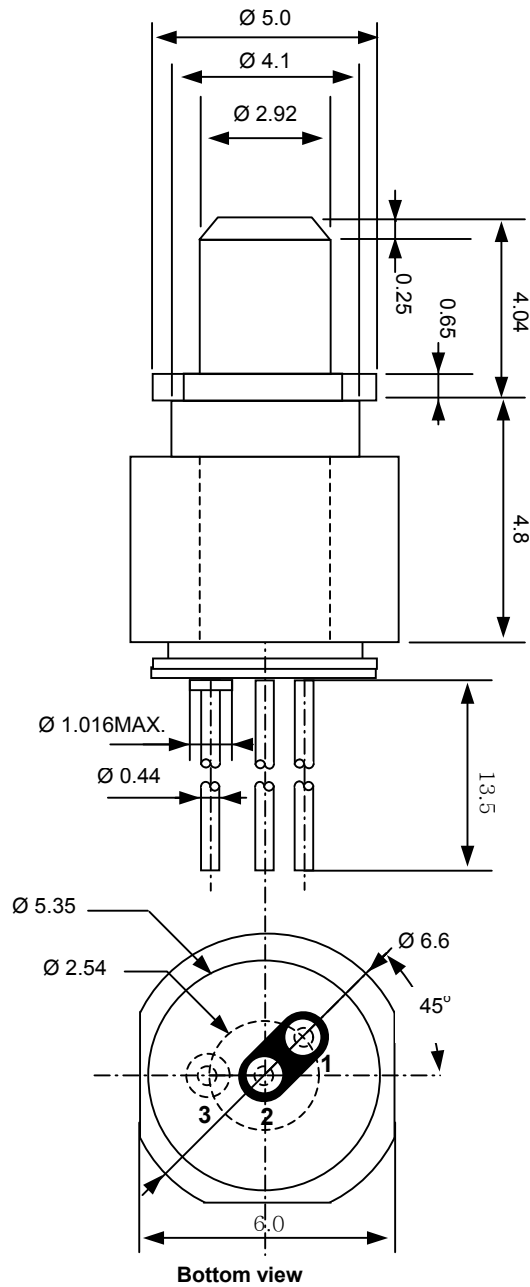


Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 100 °C
Operating Temperature	0 to 70 °C
Lead Solder Temperature	260 °C, 10 sec
Continuous Forward Current	30mA
Continuous Reverse Voltage	5V (@10µA)

Dimensions

Unit:mm



PINOUT

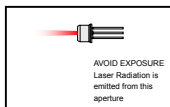
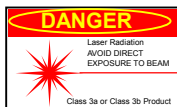
Number	Function
1	A _{LD}
2	K _{LD}
3	NC

Electro-Optics Characteristics ($T_a=25^{\circ}\text{C}$ 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_{oc}		2.5		mW	$I_f = 20 \text{ mA}, 50/125 \mu\text{m fiber}$ NA=0.20
Threshold Current	I_{th}		5		mA	CW
I_{th} Temperature Variation	ΔI_{th}		2.5		mA	$T_a=0 \text{ to } 70^{\circ}\text{C}$
Slope Efficiency	η	0.05	0.1		W/A	$I_f = 20\text{mA}$
η Temperature Coefficient	$\Delta\eta / \Delta T$		-0.5		%/ $^{\circ}\text{C}$	$T_a=0 \text{ to } 70^{\circ}\text{C}$ at 20mA
Peak Wavelength	λ	840	850	860	nm	$I_f = 20\text{mA}$
λ_P Temperature Coefficient	$\Delta\lambda / \Delta T$		0.06			$T_a=0 \text{ to } 70^{\circ}\text{C}$ at 20mA
Spectral Bandwidth (RMS)	$\Delta\lambda$			0.85	nm	$I_f = 20\text{mA}$
Forward Voltage	V_f	1.6	1.9	2.2	V	$I_f = 20\text{mA}$
Breakdown Voltage	V_b		-10		V	
Dynamic Resistance	R_d		20	40	Ohm	$I_f = 20\text{mA}$

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.