

PM98-F1P0N

1.25/2.5Gbps 980nm VCSEL TO-46 Can Package

Features

- : 980nm wavelength range
- : High data rate 1.25 / 2.5Gbps
- : High reliability
- : Low current and voltage
- : Flat window Type TO-46 Can package
- : Other configurations available on request

Applications

- : High speed Data Communications
- : Fiber Channel

Description



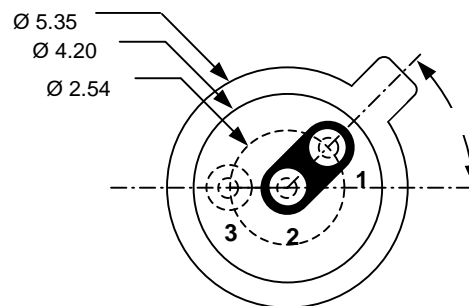
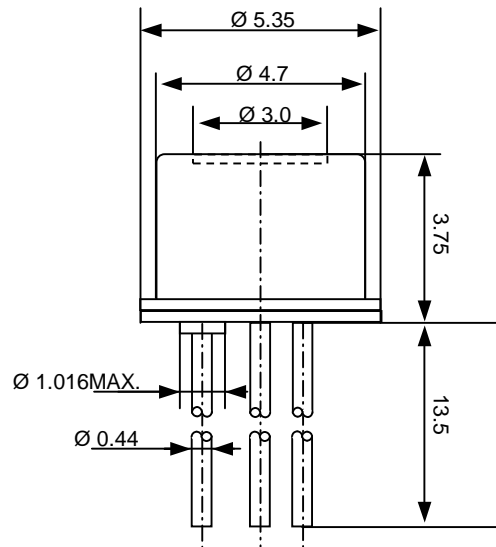
Absolute Maximum Ratings

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)

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Dimensions



Bottom view

PINOUT

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

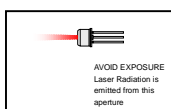
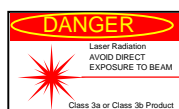
Unit:mm

Electro-Optics Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise stated)

Parameters	Symbol	Specified			Unit	Test Conditions
		Min.	Typ.	Max.		
Threshold Current	I_{th}		1.5		mA	CW
I_{th} Temperature Variation	ΔI_{th}		1.5		mA	$T_a = 0$ to 85°C
Slope Efficiency	η	0.2	0.3	0.5	W/A	$I_f = 6$ mA
η Temperature Coefficient	$\Delta\eta / \Delta T$		-0.5		%/ $^{\circ}\text{C}$	$T_a = 0$ to 85°C at 6 mA
Optical Output Power	P_o		1.5		mW	$I_f = 6$ mA
Peak Wavelength	λ_P	970	980	990	nm	$I_f = 6$ mA
λ_P Temperature Coefficient	$\Delta\lambda / \Delta T$		0.06			$T_a = 0$ to 85°C at 6 mA
Spectral Bandwidth (RMS)	$\Delta\lambda$			0.85	nm	$I_f = 6$ mA
Beam Divergence	Θ	14		30	$^{\circ}$	$P_o = 1.5$ mW, Full Width, $1/e^2$
Forward Voltage	V_f		1.6	2.0	V	$I_f = 6$ mA
Breakdown Voltage	V_b		-10		V	
Dynamic Resistance	R_d	25	35	55	Ohm	$I_f = 6$ 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

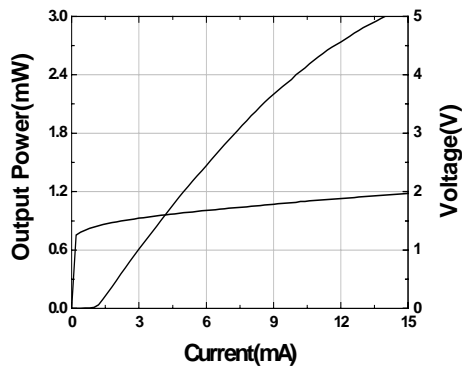
The VCSEL is a class IIIb laser and should be treated as a potential eye hazard. Due to the size of the component, the applicable warning logotype, aperture label, and certification / identification label cannot be placed on the component itself.

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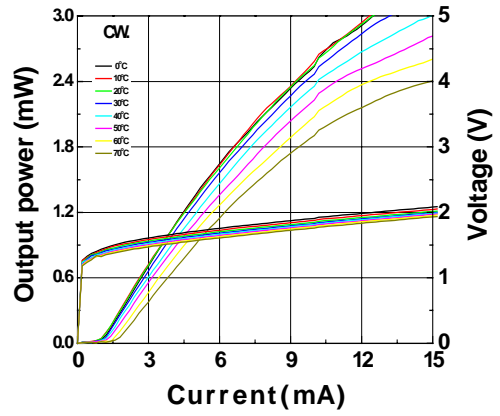
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Characteristics Curves

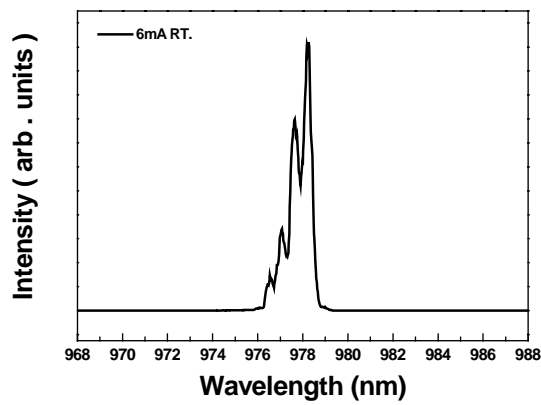
LIV Curve



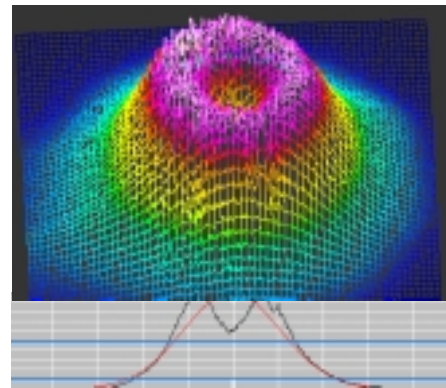
LIV vs Temperature



EL Spectrum



FFP



Eye Diagram

