

GS78-FCP0S

780nm Single mode VCSEL Pigtail

Features

- : Single-mode 780nm VCSEL
- : data rates > 1 Gbps
- : Low current and voltage
- : SC/FC fiber connectorized
- : Other configurations available on request

Applications

- : High speed Data Communications
- : Gigabit Ethernet
- : Fiber Channel

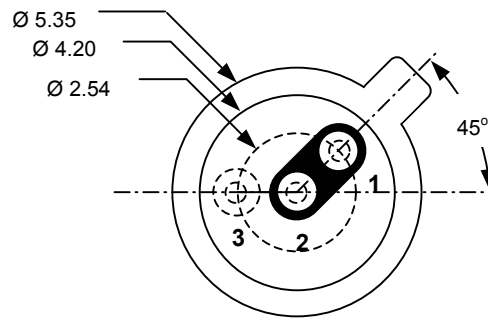
Description



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	8mA
Continuous Reverse Voltage	5V (@10µA)

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



Bottom view

PINOUT

Number	Function
1	A_{LD}
2	K_{LD}
3	NC

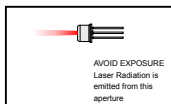
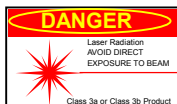
Unit : mm

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}		2.5	4	mA	CW
Slope Efficiency	η	0.01	0.05		W/A	$I_f = 5\text{mA}$
Optical Output Power	P_o		0.15		mW	$I_f = 5\text{mA}$
Peak Wavelength	λ	770	780	790	nm	$I_f = 5\text{mA}$
λ Temperature Variation	$\Delta \lambda / \Delta T$		0.06			$T_a=0$ to 70°C at 5mA
Beam Divergence	Θ		15		$^{\circ}$	$I_f = 5\text{mA}$, (Full Width, $1/e^2$)
Operating Voltage	V_f	1.6	1.9	2.2	V	$I_f = 5\text{mA}$
Breakdown Voltage	V_b		-10		V	
Dynamic Resistance	R_d		50		Ohm	$I_f = 5\text{mA}$
Side mode suppression ratio	SMSR	15	25		dB	$I_f = 5\text{mA}$
Dynamic Resistance	R_d	20	35	55	Ohm	$I_f = 5\text{mA}$

Notes

* These specifications are subject to change without notice



NOTICE

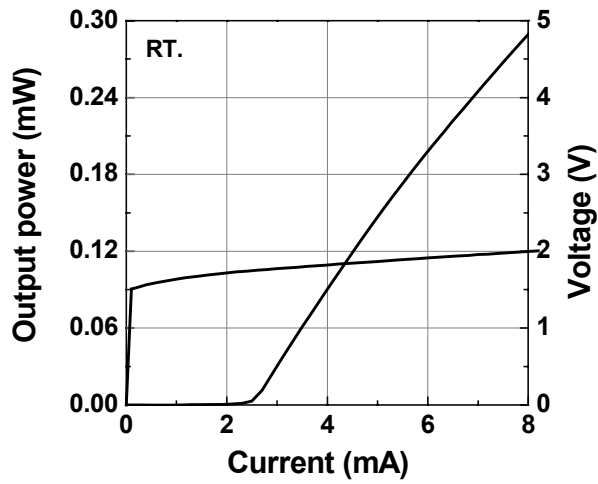
The inherent design of this component causes it to be sensitive to electrostatic discharge(ESD). To prevent ESD-induced damage and/or degradation to equipment, take normal ESD precautions when handling this product

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.

Characteristics Curves

LIV Curve



EL Spectrum

