

Features

- : Single-mode 850nm VCSEL
- : data rates > 155 Mbps
- : Low current and voltage
- : FC/ SC type connector available
- : Other configurations available on request

Applications

- : Data Communications
- : Ethernet

Description



Absolute Maximum Ratings

Parameter	Rating
Storage Temperature	-40 to 85 °C
Operating Temperature	0 to 70 °C
Lead Solder Temperature	260 °C, 10 sec
Continuous Forward Current	8mA
Continuous Reverse Voltage	5V (@10µA)

Part Number :

Description :

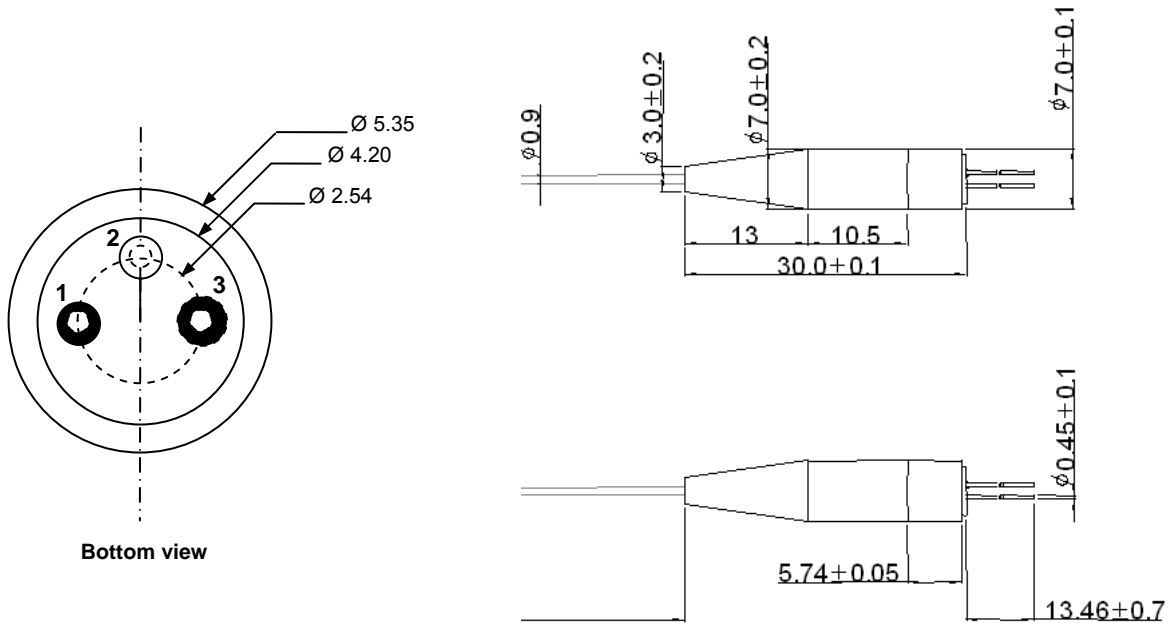
GS85-FCP0T

850nm 155Mbps FC type connector Pigtail, without m-PD

GS85-SCP0T

850nm 155Mbps SC type connector Pigtail , without m-PD

PIN OUT



PIN OUT

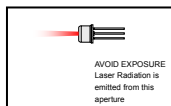
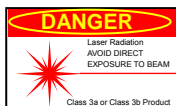
GS85-FCP0T (FC type)		GS85-SCP0T (SC type)	
Number	Function	Number	Function
1	A _{VCSEL}	1	A _{VCSEL}
2	NC	2	NC
3	K _{VCSEL}	3	K _{VCSEL}

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	2.5	mA	CW
I_{th} Temperature Variation	ΔI_{th}		1		mA	$T_a = 0$ to 70°C
Slope Efficiency	η		0.1		W/A	$I_f = 3.5$ mA
η Temperature Coefficient	$\Delta\eta / \Delta T$		-0.5		%/ $^{\circ}\text{C}$	$T_a = 0$ to 70°C at 3.5 mA
Fiber Optical Output Power	P_o	0.1	0.3		mW	$I_f = 3.5$ mA
Peak Wavelength	λ_p	840	850	860	nm	$I_f = 3.5$ mA
λ_p Temperature Coefficient	$\Delta\lambda / \Delta T$		0.06			$T_a = 0$ to 70°C at 3.5 mA
Forward Voltage	V_f		1.7	2.1	V	$I_f = 3.5$ mA
Breakdown Voltage	V_b		-10		V	
Dynamic Resistance	R_d		60		Ohm	$I_f = 3.5$ mA
Side mode suppression Ratio	SMSR		20		dB	$I_f = 3.5$ mA
Max. singlemode Current	I_{SM}		4		mA	SMSR > 20dB

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.