

1270nm 10G 4Pin DFB TO

BH5B-81A0-3F Series

TYPE NAME: BH5B-81A0-3F

Product Description:

The LuxNet BH5B-81A0-3F DFB TO-56 assembly is designed for high speed, high performance data communication and telecommunication applications. This device is integrated with a 1270nm 10Gbps DFB laser, a TO-56 header, a monitoring photodiode, and a Aspherical lens cap. The product is designed for 10Gbps short and intermediate-reach optical communication systems. This TO header assembly can be integrated with different types of ports providing good coupling efficiency with single-mode fiber.

Product Specifications:

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature (Ta)	T _{op}	°C	-40	85	
Storage Temperature	T _{stg}	°C	-40	85	
Solder Temperature	STEM	°C		260	10 seconds max.
Laser forward bias current		mA		80	
Reverse Voltage	V _r	V		2	
Photodiode Forward Current	I _{pd}	mA		10	

Electro-Optical Characteristics (Tc = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Threshold Current	I _{th}	mA		8	15	CW, Tc= 25°C
Forward Voltage	V _{op}	V		1.2	1.5	CW, I _{th} +20mA
Slope Efficiency	SE	mW/mA	0.36			Average, I _{th} + 5 mA to I _{th} + 20 mA
Peak Wavelength	λ _p	nm	1260	1270	1280	CW, I _{th} +20mA ,
Side Mode Suppression Ratio	SMSR	dB	35			CW, I _{th} +20mA ,
Rise Time/ Fall Time	Tr/T _f	ps		50/50		I _{th} +20mA, 20-80%

Photodiode Characteristics (Tc = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Monitor Current	I _m	mA	0.10		0.80	CW, I _{th} +20 mA, VRPD 2V
Dark Current	I _d	nA			100	P _{oc} = 0, V _r = 1.7V
PD Capacitance	C	pF		10	20	V _r = 5V @ 1MHz

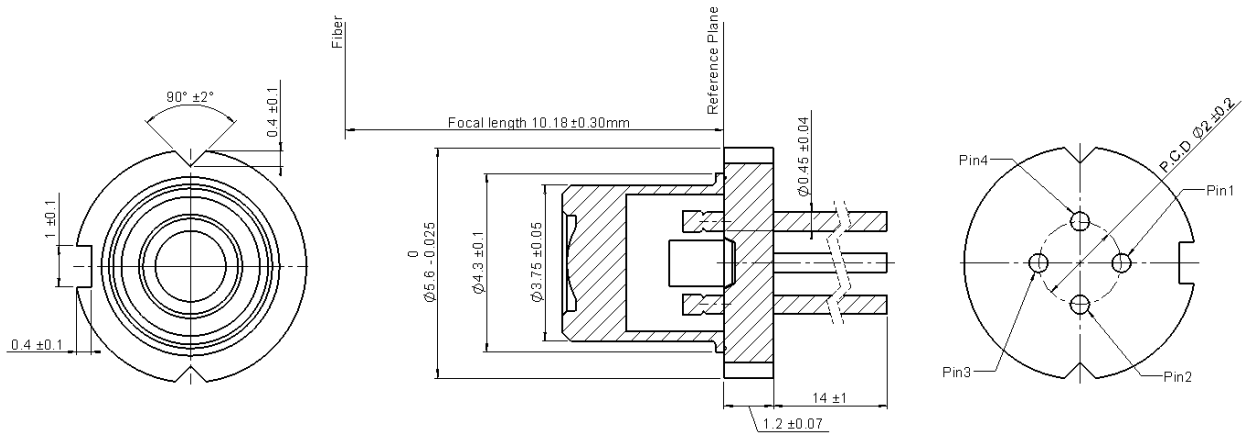
* Specifications are subject to change without notice.

* Screening per customer-specified reject limits is available.

Version 1.2

BH5B-81A0-3F(DFB TO-can)

Dimensions: (mm)



PINOUT

BH5B-81A0-3F	
Number	Function
1	Photodiode Anode /Case
2	Laser Diode Cathode
3	Photodiode Cathode
4	Laser Diode Anode

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* Screening per customer-specified reject limits is available.