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1310nm 10Gbps FP Lasers TO-Can

FI5A-8100-x Series

TYPE NAME: FI5A-8100-7A6

Product Description:

The LuxNet FI5A-8100-x TO-56 header assembly is designed for high speed, high performance data communication and telecommunication applications. This device is integrated with a 1310 nm 10Gbps FP laser, a TO-56 header, a monitoring photodiode, and a ball 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 that are engaged with a single mode fiber connector to provide good coupling efficiency as light generated by the FP laser is transmitted into a 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 Reflow Temperature	STEM	°C		260	10 seconds max.
Maximum Power	P _o	mW		10	
Reverse Voltage	V _r	V		2	
Photodiode Forward Current	I _{pd}	mA		10	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Threshold Current	I _{th}	mA		10	15	CW, Ta=25°C
Forward Voltage	V _f	V		1.2	1.5	CW, I _{op} =35mA
Slope Efficiency	η	mW/mA	0.20			Average, I _{th} +5mA to I _{th} +20 mA
Peak Wavelength	λ_p	nm	1290	1310	1330	CW, I _{op} =35mA
Spectral Wavelength (RMS)	$\Delta\lambda$	nm			3	CW, I _{op} =35mA
Rise / Fall Time	τ_r	ps		50/50		I _{th} +20mA, 20-80%

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

Parameter	Symbol	Unit	Min.	Typ	Max	Test Condition
Monitor Current	I _m	mA	0.1		0.8	CW, I _{op} =35mA , VRPD = 2 V
PD Dark Current	I _d	nA			100	P _{oc} = 0, V _r = 1.7V
PD Capacitance	C	pF		10	20	V _r = 5V @ 1MHz

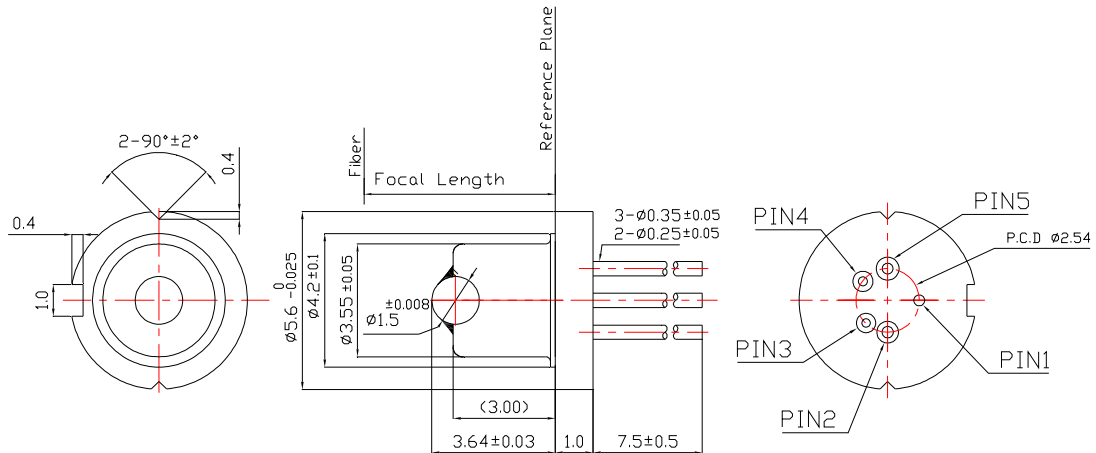
- * Specifications are subject to change without notice.
- * Screening per customer-specified reject limits is available.

Version 1.0

FI5A-8100-7A6 (TO-can)

Dimensions: (mm)

All dimensions are nominal



PINOUT

FI5A-8100-7A6(FL:5.8±0.2mm)	
Number	Function
1	Photodiode Anode
2	Laser Diode Cathode
3	Photodiode Cathode
4	NC
5	Laser Diode Anode

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Notice

Version	Date	Status	Description	Signature
1.0	2014/08/01	Initial	FI5A-8100-7A6 Specification	Allen

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