

No. 6, Hejiang Road, Jhongli City, Taoyuan County, TAIWAN Tel: +886-3-452-5188 Fax: +886-3-462-9588 www.luxnetcorp.com.tw

1310 nm 1.25/2.5Gbps FP Lasers TO without Monitor PD

FI2B-8116-x Series

TYPE NAME: FI2B-8116-S

Product Description:

The LuxNet FI2B-8116-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 2.5 Gbps FP laser, a TO-56 header and a 1.5 mm ball lens cap. The product is designed for 2.5Gbps 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	T_{op}	°C	-40	85	
Storage Temperature	T_{stg}	°C	- 40	100	
Solder Reflow Temperature				260	10 seconds max.
Maximum Power	Po	mW		10	
Laser Reverse Voltage	V_{RL}	V		2	
Laser Forward Current	I_{FL}	mA		150	

Electro-Optical Characteristics ($T = 25^{\circ}C$, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Тур	Max.	Test Condition
Threshold Current	I_{th}	mA		10	15	T=25°C
					30	T=0 to 85°C
Forward Voltage	V_{f}	V		1.2	1.5	T=0 to 85°C, Ith+20mA
Slope Efficiency	η	mW/mA	0.25	0.4	0.7	Average, I_{th} +5 mA to I_{th} +20
						mA
Peak Wavelength	λ_{p}	Nm	1290	1310	1330	$P_o=5$ mW
Spectral Wavelength (RMS)	$\Delta\lambda$	nm		1.0	3	$P_o=5$ mW@1 δ , T=0 to 80 $^{\circ}$ C
Beam Divergence Angle (//)		degree		10		P _o =5mW, FWHM
Beam Divergence Angle (⊥)				15		
Rise Time	$ au_{ m r}$	ps		150	200	P _o =5 mW,
	-1					20-80%, T=0 to 85°C
Fall Time	$ au_{ m f}$	ps		150	200	P _o =5 mW,
	1					20-80%, T=0 to 85°C
Relaxation Oscillation	f_r	GHz	4	7		P _o =5 mW
Frequency						
Fiber coupling efficiency		%	10	12		CW, P _o =5 mW,SI10/125(PC
						fiber w/o theta alignment)

^{*} Specifications are subject to change without notice.

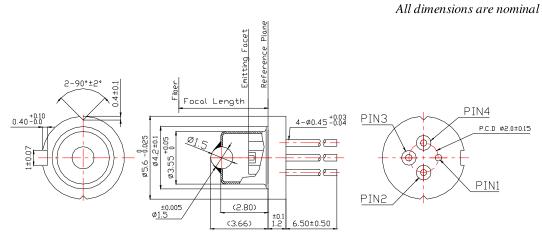
^{*} Screening per customer-specified reject limits is available.



No. 6, Hejiang Road, Jhongli City, Taoyuan County, TAIWAN Tel: +886-3-452-5188 Fax: +886-3-462-9588 www.luxnetcorp.com.tw

FI2B-8116-x (FP TO-can)

Dimensions: (mm)



PINOUT

FI2B-8116-S (FL:6.3±0.1mm)			
Number	Function		
1	Case Gnd		
2	Laser Diode Cathode (LD-)		
3	NC		
4	Laser Diode Anode (LD+)		

^{*} Specifications are subject to change without notice.

^{*} Screening per customer-specified reject limits is available.