

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	P_o	mW		10	
Laser Reverse Voltage	V_{RL}	V		2	
Laser Forward Current	I_{FL}	mA		150	

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

Parameter	Symbol	Unit	Min.	Typ	Max.	Test Condition
Threshold Current	I_{th}	mA		10	15 30	T=25°C T=0 to 85°C
Forward Voltage	V_f	V		1.2	1.5	T=0 to 85°C, $I_{th}+20mA$
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	$P_o=5mW$
Spectral Wavelength (RMS)	$\Delta\lambda$	nm		1.0	3	$P_o=5mW@1\delta$, T=0 to 80°C
Beam Divergence Angle (//) Beam Divergence Angle (\perp)		degree		10 15		$P_o=5mW$, FWHM
Rise Time	τ_r	ps		150	200	$P_o=5 mW$, 20-80%, T=0 to 85°C
Fall Time	τ_f	ps		150	200	$P_o=5 mW$, 20-80%, T=0 to 85°C
Relaxation Oscillation Frequency	f_r	GHz	4	7		$P_o=5 mW$
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.

Version 1.1

