

## LxPx-ST11xx Low Profile Optical Transceiver



### InfiniBand Applications 3.3V, 850nm VCSEL, Multimode, Up to 150Meters

#### Applications

The LxPx-ST11xx multimode optical fiber transceivers provide low profile, cost effective solutions for InfiniBand multimode optical fiber data links with a duplex LC connector interface.

These transceivers are fully compliant with the InfiniBand standards but can be used for any other data communications purpose within their operating parameters.

#### Key Features & Benefits

- Low Profile Design - 0.386 inches max. height
- Surface mount I/O pins for high speed signal integrity
- All metal body, solder or screw mount options
- Industrial Temp Range, Vibration tolerant design
- RX data squelch on Signal Detect deassert
- Individual (separate) +3.3 V power supply per port
- Industry standard duplex multimode LC receptacle
- Compliant with InfiniBand 1x Architecture
- EN-60825 / IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating
- High Power options available
- Optional addition of fiber pigtail

#### Ordering Information

Low Rider	L	X	P	X	-	ST11	X	X
Roughrider <sup>1</sup>	RR		P	X	-	ST11	X	X

#### Shell Options

N= No GND  
Tabs (Flat  
Shell)  
T= GND Tabs

#### Extended Margin Link

BLANK=  
Standard Power  
2= +2dB Margin  
3= +3dB Margin  
5= +5dB Margin

#### Temperature and coating

H= -40 to 85 C,  
No Coating  
M= -40 to 85 C,  
Conformal  
Coating

#### Mounting

BLANK= Solder  
Posts  
(0.125 length)  
B= Screw Posts  
(0.050 length)

1. See product data sheet for information on Roughrider products.

#### Transmitters: VCCTX = 3.135V to 3.465V, T<sub>A</sub> = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Output Power <sup>1</sup>					
LxP-ST11xx	P <sub>O</sub>	-10.0		-4.0	dBm
LxP2-ST11xx (+2dB Margin)		-8.0		-1.5	
LxP3-ST11xx (+3dB Margin)		-7.0		-1.5	
LxP5-ST11xx (+5dB Margin)		-5.0		-1.5	
Extinction Ratio	ER		9		dB
Optical Modulation Amplitude (p-p)	OMA	196			μW

#### Receivers: VCCR<sub>X</sub> = 3.135V to 3.465V, T<sub>A</sub> = Operating Temperature Range

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Sensitivity <sup>1,2</sup>	PI	-15.0		0	dBm
Optical Modulation Amplitude	OMA	50			μW

1. BER=10<sup>-12</sup> @ 2.5 GigaBaud, PRBS = 2<sup>7</sup>-1, NRZ, Compliant with InfiniBand Architecture Specification

2. Assuming an Extinction Ratio of 9 dB

### Link Distances

Fiber Specification	Application	Distance
62.5/125 (200MHz*Km)	InfiniBand (2.5Gbps)	125M
50/125 (500MHz*Km)	Infiniband (2.5Gbps)	150M

*For more information on this product consult the LxPx-ST11xx product data sheet.*

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