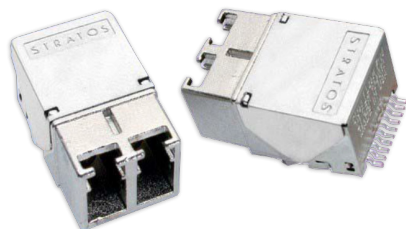


# LxK-LT12xx Low Profile Optical Transceiver

Gigabit Ethernet/1x Fiber Channel 3.3V, 1310nm FP Laser,  
Singlemode, Up to 10.0 Km

## Applications

The LxK-LT12xx singlemode optical fiber transceivers provide low profile, cost effective solutions for Gigabit Ethernet and 1x Fiber Channel optical fiber data links with a duplex LC connector interface. These transceivers are fully compliant with the IEEE Gigabit Ethernet and ANSI 1x Fiber Channel standards but can be used for any other data communications purpose within their operating parameters.



## Features

- Low Profile Design - 0.38 inches max. height
- Compatible with SMT and aqueous wash processes
- Overall metal shield with enhanced grounding tabs
- Single ended LVTTTL Signal Detect function
- Differential LVPECL inputs and CML outputs
- RX data squelch on Signal Detect deassert
- Single +3.3V power supply per port
- Duplex singlemode LC receptacle
- Full compliance to IEEE and ANSI requirements
- EN-60825/ IEC-825 / CDRH Class 1 Compliant
- Optional Parylene C Conformal Coating
- Optional addition of fiber pigtail

## Ordering Information

Low Rider	L	X	K - LT12	X	X
Roughrider <sup>1</sup>	RR		K - LT12	X	X
Shell Options			Mounting		
N – No GND Tabs (Flat Shell)			BLANK – Solder Posts (0.125 length)		
T – GND Tabs			B – Screw Posts (0.050 length)		
			Temperature and Coating		
			H – -40 to 85°C, no coating		
			M – -40 to 85°C, conformal coating		

**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>	P <sub>O</sub>	-9.5		-3	dBm
Extinction Ratio	ER	9			dB
Total Jitter	T <sub>J</sub>			153	pS

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

Parameter	Symbol	MIN	Typical	MAX	Unit
Optical Sensitivity <sup>1</sup>	P <sub>I</sub>	-20		0	dBm
Optical Return Loss	ORL	12			dB

1. BER=10<sup>-12</sup> @ 1.25Gbps, PRBS = 2<sup>7</sup>-1, NRZ, Compliant with IEEE-802.3z and ANSI X3.297 / FC-PH-2.

2. RX Data outputs are squelched when Signal Detect is deasserted to prevent garbage data output when no optical signal is present.

For more information on this product consult the LxK-LT12xx product data sheet.