LinkPro FiberLink

Mini GBIC Single-mode Transceiver SFP
Duplex LC Connector,1310nm, 10KM

Features:

- **Compliant with IEEE 802.3Z Gigabit Ethernet Standard**
- **One design operating +3.3V**
- **SFP form factor with LC duplex connectors**
- **power supply; ROHS standard**
- **Hot Pluggable**
- **Interface : Plug & Play**

ABSOLUTE MAXIMUM RATINGS:

PARAMETER	SYMBOL	MIN	MAX	UNITS	NOTE
STORAGE TEMPERATURE	T_S	-40	+85	°C	
SUPPLY VOLTAGE	V_{CC}		6.0	V	
SOLDERING TEMPERATURE	T_{SOLD}		260	°C	10S ON LEADS

RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	NOTE
Ambient Operating Temperature	T_{AMB}	0		+70	°C	
SUPPLY VOLTAGE	V_{CC}	3.15		5.25	V	

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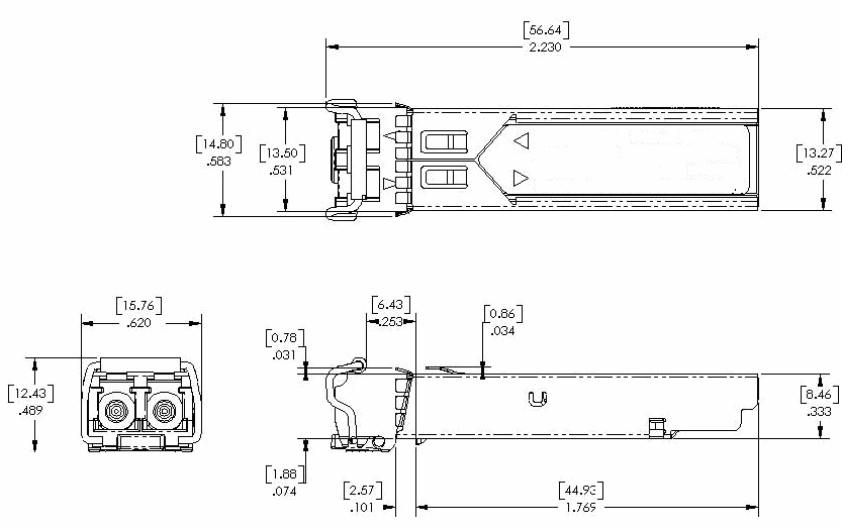
TRANSMITTER ELECTRO-OPTICAL CHARACTERISTICS: (V_{cc} = 3.15V to 3.45V, T_A = 0°C to +70°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	NOTE
Data Rate	B		1250		Mb/s	
Output Optical Power (LX)	Pout	-9		-3	dBm	Average
Receiving Optical Power (LX) Overload Sensitivity	Pout	<-24		> -3	dBm	Average
Extinction Ratio	ER	9			dB	
Center Wavelength	λ_C	1270	1310	1355	nm	
Spectral Width RMS	$\Delta\lambda_{rms}$			4	nm	(LX)
Relative Intensity Noise RIN @1.25GHz (LX)				<-120	dB/Hz	
Rise/Fall Time	T_R/T_F			260	ps	
OUtput Eye Mask(	Compliant with IEEE 802.3z					
Total Jitter				227	ps	PRBS 2^7-1
Transmit Data Input Voltage - High	V_{ISH}	Vcc-1.2		Vcc-0.9	V	
Transmit Data Input Voltage - Low	V_{ISL}	Vcc-1.9		Vcc-1.6	V	
Transmit Disable Input Voltage - High	V_{IH}	2.0		V_{CC}+0.3	V	
Transmit Disable Input Voltage - Low	V_{IL}	0		0.8	V	
Transmit Fault Output - High	V_{TOH}	Vcc-0.5		Vcc+0.3	V	
Transmit Fault Output - Low	V_{TOL}	0		0.5	V	
Supply Current	I_{CC}			300	mA	The whole module.
Power Consumption	P			1035	mW	The whole module.

RECEIVER ELECTRO-OPTICAL CHARACTERISTICS: (V_{cc} = 3.15V to 3.45V, T_A = 0°C to +70°C)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	NOTE
Data Rate	B		1250		Mb/s	
Sensitivity			-26	-20		BER <10-12
Average Max. Optical Input Power	$P_{IN\ max}$	-3	0		dBm	BER <10-12
Center Wavelength	λ_C	1270		1355	nm	
Optical return Loss	ORL	12			dB	
Signal Detect - Asserted	P_A		-27	-25	dBm	
Signal Detect - De-asserted	P_D	-33	-31		dBm	
Signal Detect - Hysteresis	$P_A - P_D$	1	4		dB	
Signal Detect - Assert Time	T_{SD+}			100	µs	
Signal Detect - De-assert Time	T_{SD-}			100	µs	
Data Output Rise/Fall Time	T_R/T_F			260	ps	
RX Loss Output Voltage - High	V_{OH}	Vcc-0.5		Vcc+3.0	V	
Rx Loss Output Voltage - Low	V_{OL}	0		0.5	V	



X. PCB Layout and Bezel Recommendations

Ordering Information:

MGB-S10 : SFP, Duplex LC Connector, 1310nm, 10KM

* Product specification subject to change without notice.