

SFP-100LX

100M, SFP, LX, SMF TRANSCEIVER 1310nm, 10km
REACH, DUPLEX LC CONNECTOR

SFP-100LX

100M, SFP, LX, SMF TRANSCEIVER 1310nm, 10km REACH, DUPLEX LC CONNECTOR

Product Features

- INF-8074 and SFF-8472 Compliance
- Duplex LC Connector
- Single-mode Fiber
- Hot Pluggable
- Excellent ESD Protection
- Metal with Lower EMI
- RoHS Compliant and Lead Free
- Available operating temperature ranges:
 - Commercial: 0°C to 70°C
 - Industrial: -40°C to 85°C



Product Applications

- 100Base Ethernet
- Access and Enterprise

I. Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Storage Temperature	TS	-40		+85	°C
Max Supply Voltage	Vcc	-0.5		3.6	V
Operating Humidity	RH	5		95	%
Receive Power	R _{MAX}			-8	dBm

II. Operating / Environment Specifications

Parameter		Symbol	Min.	Typ.	Max.	Units
Case Operating Temperature	Commercial	TC	0		+70	°C
	Industrial		-40		+85	°C
Data Rate				100/155		Mbps
Link Distance		D		10		km

III. Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Optical Wavelength	Tλ	1260	1310	1360	nm	
Average Output Power	P _{out}	-15		-8	dBm	1
Extinction Ratio	ER	9			dB	2
Spectral Width (RMS)	Δλ			4	nm	
P _{out} @TX Disable Asserted	P _{out}			-45	dBm	
Rise/Fall Time (20%~80%)	tr/tf			2	ns	
Receiver						
Centre Wavelength	λ _c	1260		1600	nm	
Receiver Sensitivity	P _{min}			-3	dBm	3
Receiver Overload	P _{max}	-2			dBm	

Notes:

1. Coupled into a Single-mode fibre
2. Filtered, measured with a PRBS 2²³ -1 test pattern @155Mbps.
3. Minimum average optical power is measured at BER less than 1E-12, with 2²³ -1 PRBS and ER=9 dB

SFP-100LX

100M, SFP, LX, SMF TRANSCEIVER 1310nm, 10km
REACH, DUPLEX LC CONNECTOR



IV. Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Power Supply Voltage	V _{CC}	3.15	3.3	3.45	V	
Power Supply Current	I _{CC}			300	mA	
Power Consumption	P _{DISS}			800	mW	
Transmitter						
Single ended data input swing	V _{in,pp}	400		2000	mVpp	1
Input differential impedance	Z _{in}	85	100	120	Ω	2
Receiver						
Single ended data output swing	V _{out,pp}	400		2000	mVpp	1
Output differential impedance	Z _{in}	85	100	120	Ω	

Notes:

1. AC coupled.
2. R_{in} > 100 kohms @ DC

V. Ordering Information

Pivotal Part Number	Description
SFP-100LX	SFP, 1310nm, LX SMF 10km, 100M, C-Temp
SFP-100LX-I	SFP, 1310nm, LX SMF 10km, 100M, I-Temp

Notes:

1. Please contact sales for specific OEM Platform part numbers to fit your network.

Warranty

<https://pivotaloptics.com/warranty/>

Disclaimer

External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.