

SFP-100M-FX

155 Mbps SFP Transceiver, 1310nm, 2KMReach

Features

- ◆ Support up to 155 Mbps data links
- ◆ Support transmission on 50/125µm MMF / 2KM transmission on 62.5/125µm MMF
- ◆ Duplex LC Connector Interface
- ◆ Hot-Pluggable Capability
- ◆ Compliant with SFP MSA and Digital Diagnostic Monitor interface SFF-8472
- ◆ Eye safety designed to meet Laser Class1, compliant with IEC60825-1
- ◆ Single +3.3V power supply and TTL logic interface
- ◆ Operating case temperature:
Commercial: 0°C to +70°C / Industrial: -40°C to +85°C
- ◆ RoHS6 Compliant



Applications

- ◆ SONET OC-3/SDH STM-1
- ◆ Fast Ethernet
- ◆ Other optical transmission systems

Ordering information

Part Number	Product Description
SFP-100M-FX	155Mbps SFP, 1310nm, 2km, DDM, 0°C ~ +70°C
SFP-100M-FX-I	155Mbps SFP, 1310nm, 2km, DDM, -40°C ~ +85°C



Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T_{ST}	-40	+85	°C
Power Supply Voltage	V_{CC}	0	+3.6	V
Operating Relative Humidity		5	95	%

Exceeding any of these values may be harmful for the device

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	
Operating Case Temperature	Commercial	T_{OP}	0		+70	°C
	Industrial		-40		+85	
Power Supply Voltage	V_{CC}	+3	+3.3	+3.6	V	
Power Supply Current	I_{CC}			300	mA	
Data Rate	FE	B		100	Mbps	
	OC3/STM-1			155		

Transmitter Optical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Center Wavelength	λ_c	1260	1310	1360	nm
Average Output Power	P_0	-20		-14	dBm
Spectral Width (RMS)	$\Delta\lambda$			4	nm
Extinction Ratio	ER	9		16	dB

Note: Average Output Power as coupled into a 9/125 μ m single-mode fiber

Receiver Optical Specifications

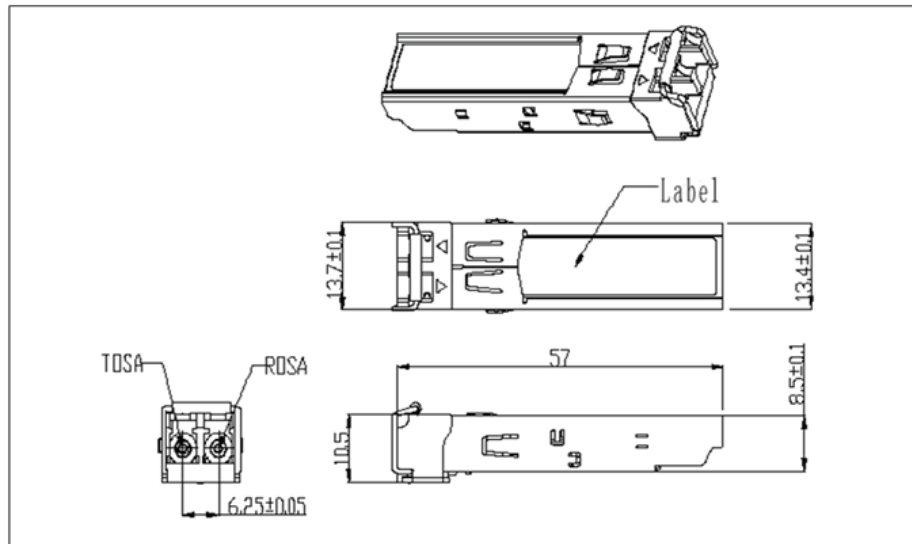
Parameter	Symbol	Min.	Typ.	Max.	Unit
Center Wavelength	λ_c	1260		1600	nm
Receiver Sensitivity	P_{MIN}			-31	dBm
Receiver Overload	P_{MAX}	-3			dBm

Note: Sensitivity is measured at 1.25Gbps PRBS 2⁷-1 data pattern, ER=9, BER \leq 10⁻¹²



Mechanical Dimensions

LC Interface



Note that this drawing is for reference purpose only

Laser Emission



Revision History:

Revision	Date	Author	Description
V1.0	24-01-19	JGN	Initial Document

Note

Nexgen reserves the right to change this document without notice.