

XFP-SR

10GBASE, XFP, SR, MMF TRANSCEIVER

850nm, 300m REACH, DUPLEX LC CONNECTOR

Product Features

- Supports up to 11.3Gb/s data rates
- Hot-pluggable XFP Footprint
- Maximum Link Length up to 300m
- 850nm VCSEL laser and PIN photodiode
- Duplex LC Connector
- No external clock required.
- Single +3.3V power supply
- Power Dissipation <1.5W
- Built-in Digital Diagnostic Functions
- Available operating temperature ranges:
 - Commercial: 0°C to 70°C



Product Applications

- 10GBASE-SR/SW & 10G Ethernet
- OTN / FC
- Other optical links

I. Maximum Ratings

Exceeding the limits below may damage the transceiver module permanently.

Parameter	Symbol	Min.	Typ.	Max.	Units
Supply Voltage	Vcc	-0.5		4.5	V
Operating Humidity			5	85	%
Storage Temperature	TS	-40		+85	°C

II. Operating/Electrical Specifications

Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Case Operating Temperature	TC	0		+70	°C	Commercial
Supply Voltage (@3.3V)	Vcc	3.13	3.3	3.45	V	
Power Supply Current	Icc			500	mA	
Data Rate			8	11.3	Gbps	

III. Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Centre Wavelength	λ_c	840	850	860	nm	
Spectral Width (-20dB)	$\Delta\lambda$			0.45	nm	
Side-Mode Suppression Ratio	SMSR				dB	
Average Output Power	P _{out}	-6.5		-0.5	dBm	1
Extinction Ratio	ER	3			dB	
Data Input Swing Differential	V _{in}	180		950	mV	2
Input Differential Impedance	Z _{in}	90	100	110	Ω	
TX Disable (Disable)	Disable	2		V _{cc}	V	
TX Disable (Enable)	Enable	0		0.8	V	
Receiver						
Optical Input Wavelength	λ_c	840		860	nm	
RX Sensitivity	P _{sen}			-11.1	dBm	3
Receiver Overload	P _{sat}	0.5			dBm	3
RX_LOS Assert	LOS A	-26			dBm	
RX_LOS De-assert	LOS D			-12	dBm	
RX_LOS Hysteresis	LOS H	0.5		4	dB	
LOS	High	2		V _{cc}	V	
	Low			0.8		
Data Output Swing Differential	V _{out}	400	600	800	mV	2

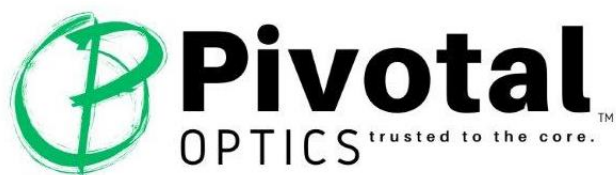
Notes:

1. The optical power is launched into SMF.
2. Internally AC-coupled.
3. Measured with a PRBS 231-1 test pattern @9953Mbps, BER $\leq 1 \times 10^{-12}$

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IV. Ordering Information

Pivotal Part Number	Description
XFP-SR	XFP, 850nm, SR MMF 300m, 10G/OC-192 DDM, C-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.