





# **4L-SFPZXDE**

SFP 1000BASE-ZX, 1550nm, SM, DDM, LC Duplex, 120km



## **Applications**

- Compliant with IEEE 802.3ae 1000BASE-ZX
- Gigabit Ethernet
- Fibre Channel
- Switch to Switch/Router Interface
- Other optical links

#### **Features**

- SFP 1.25G Duplex Optical Transceiver
- SFP MSA Compliant
- Up to 120km links on SMF
- DFB laser transmitter
- Digital Diagnostic Monitoring
- RoHS and Lead Free
- Operating temperature: 0°C ~ +70°C

### Description

The 4L-SFPxx are a SFP transceivers series for duplex optical data communications such as 1000BASE-SX, LX, EX or ZX defined by IEEE 802.3ae.

This modules are designed to operate with multi mode (MMF) or single mode fiber (SMF) and Duplex LC connectors, using the wavelengths 850nm (SX), 1310nm (LX) and 1550nm (EX, ZX and ZXE) for distances from 0 to 120km depending on the module capacity.



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## General Specifications – Absolute Maximum Ratings

Parameter	Symbol	Min	Recommended	Max
Max.LinkLength				120km
Optical Budget	dB	31dB		
Storage Temperature		-40°C		+85°C
Operating Case Temperature	Тс	0°C		+70°C
Supply Voltage	Vcc	-0.5V	3.3V	3.6V

## **Optical Specifications**

Transmitter					
Parameter	Symbol	Min	Recommended	Max	
Average Output Power	Pout	OdBm		+5dBm	
Central Wavelength		1530nm	1550nm	1560nm	
Receiver					
Parameter	Symbol	Min	Recommended	Max	
Receiver Sensitivity	Rsen	-32dBm			
Receiver Overload (Damage)	Pmax			-10dBm	
Central Wavelength	Nm	1530nm	1550nm	1560nm	



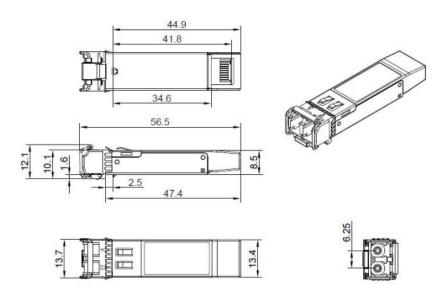
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## **Electrical Specifications**

Parameter	Symbol	Min.	Typical	Max	Unit	Ref.
Supply Voltage	V <sub>CC</sub>	3.00		3.60	V	1
Supply Current	l <sub>cc</sub>		200	300	mA	1
Transmitter						
Input differential impedance	R <sub>in</sub>		100		Ω	2
Single ended data input swing	V <sub>in,pp</sub>	150		1200	mVpp	
Transmit Disable Voltage	$V_{D}$	2		V <sub>CC</sub>	V	
Transmit Enable Voltage	$V_{EN}$	Vee		Vee+0.8	V	3
Receiver						
Output differential impedance	R <sub>out</sub>		100		Ω	2
Single ended data output swing	Vout,pp	300		700	mV	4
LOS Fault	V <sub>LOS fault</sub>	2		VCC <sub>HOST</sub>	V	5
LOS Normal	$V_{LOS\ norm}$	Vee		Vee+0.8	V	5

## Mechanical Specifications





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## Ordering Information

Part Number	Description
4L-SFPTEFG	SFP 10/100/1000BASE-T, RJ45, DDM, 100m
4L-SFPT	SFP 1000BASE-T, RJ45, DDM, 100m
4L-SFPSXD	SFP 1000BASE-SX, 850nm, MM, DDM, LC Duplex, 300m
4L-SFPLXD	SFP 10GBASE-LX, 1310nm, SM, DDM, LC Duplex, 10Km
4L-SFPEXD	SFP 1000BASE-EX, 1550nm, SM, DDM, LC Duplex, 40Km
4L-SFPZXD	SFP 1000BASE-ZX, 1550nm, SM, DDM, LC Duplex, 80Km
4L-SFPZXDE	SFP 1000BASE-ZXE, 1550nm, SM, DDM, LC Duplex, 120Km

#### Note

This modules have been tested by 4LAN on equipments like Cisco, Juniper, Dell, HP, Mikrotik, Huawei, and other brands. The equipment brand must be informed before shipping the order, so the transceivers are reprogrammed to the corresponding brand.

## **Contact Information**

Website: www.4-lan.com

Email: <a href="mailto:com.br">contato@brazilmkt.com.br</a> Telephone: +55 11 5521-2522