

1G 550m SFP Transceiver

ET4202-SX



Product Features

- Up to 1.25 Gbps data links
- 850 nm VCSEL laser and PIN photo-detector
- Up to 550 m on 50/125 μm MMF
- Duplex LC receptacle optical interface compliant
- Hot pluggable
- RoHS compliant
- Commercial operating temperature: 0°C to +70°C

Applications

- Gigabit Ethernet
- Fiber Channel
- Router/Server interface

Descriptions

The ET4202-SX transceivers are high-performance, cost-effective modules supporting a data rate of 1.25Gbps and a 550 m transmission distance with SMF. The transceivers are compatible with SFP Multi-Source Agreement (MSA) and SFF-8472. For further information, please refer to SFP MSA and SFF-8472.

Ordering Information

Part Number	Transmitter	Output Power	Sensitivity	Reach	Temp	DDM	RoHS
ET4202-SX	850 nm	-9.0 ~ -3.0 dBm	-18.0 dBm	550 m	0~ 70 °C	Available	Compliant

Datasheet

Transceiver



Pin Description

20 VeeT	1 VeeT
19 TD-	2 TxFault
18 TD+	3 TxDisable
17 VeeT	4 MOD-DEF (2)
16 VccT	5 MOD-DEF (1)
15 VccR	6 MOD-DEF (0)
14 VeeR	7 Rate Select
13 RD+	8 LOS
12 RD-	9 VeeR
11 VeeR	10 VeeR
Top of Board	Bottom of Board (as viewed thru top of board

Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of the data sheet. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Minimum	Maximum	Unit	
Storage Temperature	Ts	-40	85	°C	
Relative Humidity	RH	0	85	%	
Supply Voltage	Vcc	0	3.6	V	



Recommended Operating Conditions

Parameter	Symbol	Minimum	Typical	Maximum	Unit	
Operating Case Temperature	Тс	0	25	70	°C	
Supply Voltage	Vcc	3.135	3.3	3.465	V	
Data Rate PER Channel	-	-	1.25	-	Gb/s	

Transceiver Electrical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Input Differential Impedance	Rin	90	100	110	Ω	
Single Ended Data Input Swing	Vin PP	250		1000	mV	

Transmitter Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Launch Optical Power	Po	-9	-	-3	dBm	
Center Wavelength Range	λc	830	850	860	nm	
Extinction Ratio	ER	-9	-	-	dB	

Receiver Optical Characteristics

Parameter	Symbol	Minimum	Typical	Maximum	Unit	Notes
Center Wavelength	λς	830		860	nm	
Receiver Sensitivity in Average Power	Sen	-18			dBm	



Mechanical Specifications





Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

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