

**SFP 2 km transceiver | Cisco Compatible 622Mb SONET OC-12 / STM-4**  
**Designed for OEM networks such as Cisco, HP, Juniper, Brocade, Alcatel etc.**

### Datasheet

#### SFP Optical Transceiver Product Features

- Exclusive Japanese OSAs for Ultimate Reliability
- SONET OC-12 / STM-4 8dB SFP
- 2 km Duplex SFP for SMF @ .622Gbps
- 1310nm FP Laser 2 km SFP
- 0°C - 70°C Temperature - Extended/Industrial Available
- 2-Wire Interface Digital Diagnostic Monitoring (SFF-8724)
- Hot-swappable for SFP LC ports
- Extended 2 Years Warranty
- Tested and Certified in Brand Specific Networks and Target Applications
- Assembled Using Highest Quality Raw Components
- SFP MSA / IEEE Std 802.3 & ROHS

#### PSFP-622T31K002



#### Applications

- Optical Fast Ethernet
- SONET/SDH
- SONET OC-12
- SONET OC-3

#### Description

Platinum OEM Series PSFP-622T31K002 is a Cisco Compatible Duplex SONET OC-12 / STM-4 SFP transceiver designed for long distance optical communications up to 2 km with signaling rates up to .622Gbps.

OptoSpan Platinum OEM Series .622Gbps Duplex optical transceivers have undergone rigorous qualification and certification testing to provide End-to-End Compatibility using switching equipment from CISCO, BROCADE, JUNIPER, ALCATEL, HP (select models), NORTEL, EMC, QLOGIC and other OEMs.

All OptoSpan Platinum OEM Series long-reach SFP s are ROHS compliant, allow for real-time diagnostic monitoring as per SFF-8472 and designed to meet Multi-Source Agreement (MSA) standards for Duplex transceivers with LC interface.

#### Optical Budget Calculation for 2 km Platinum OEM SFP Optical Transceiver

PSFP-622T31K002	Distance: 2 km				Fiber: 1310nm SMF	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
<b>Product Specifications</b>	-15	-8	-23	-8		
<b>Optical Calculation Results</b>			-16.9	-9.9	1.9	8

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### General Specifications

Parameter	Unit	Min.	Typ.	Max
<b>Absolute Maximum Ratings</b>				
Maximum Supply Voltage	V	-0.5		3.6
Storage Temperature	°C	-40		+85
Case Operating Temperature	°C	0		+70
<b>Recommended Operating Condition</b>				
Supply Voltage	V	3.15	3.3	3.45
Supply Current	mA			300
Data Rate	Gbps	.125		.1250

### Electrical Characteristics

Parameter	Unit	Min.	Typ.	Max
<b>Transmitter</b>				
Differential Input Voltage Swing	mVpp	500		2000
Input Differential Impedance	ohm	85	100	115
Transmit Disable Voltage - High	V	2		Vcc
Transmit Disable Voltage - Low	V	0		0.8
Transmit Fault Voltage - High	V	2		Vcc+0.3
Transmit Fault Voltage - Low	V	0		0.5
<b>Receiver</b>				
Differential Output Voltage Swing	mVpp	370		2000
Differential Output Impedance	ohms	85	100	115
LOS Output Voltage - High	V	2		Vcc+0.3
LOS Output Voltage - Low	V	0		0.8

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### Optical Characteristics

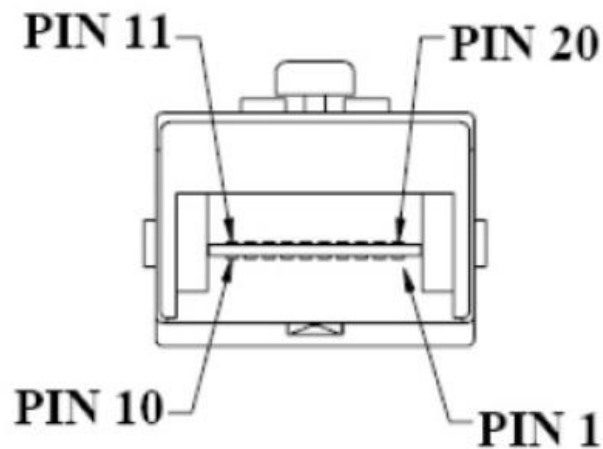
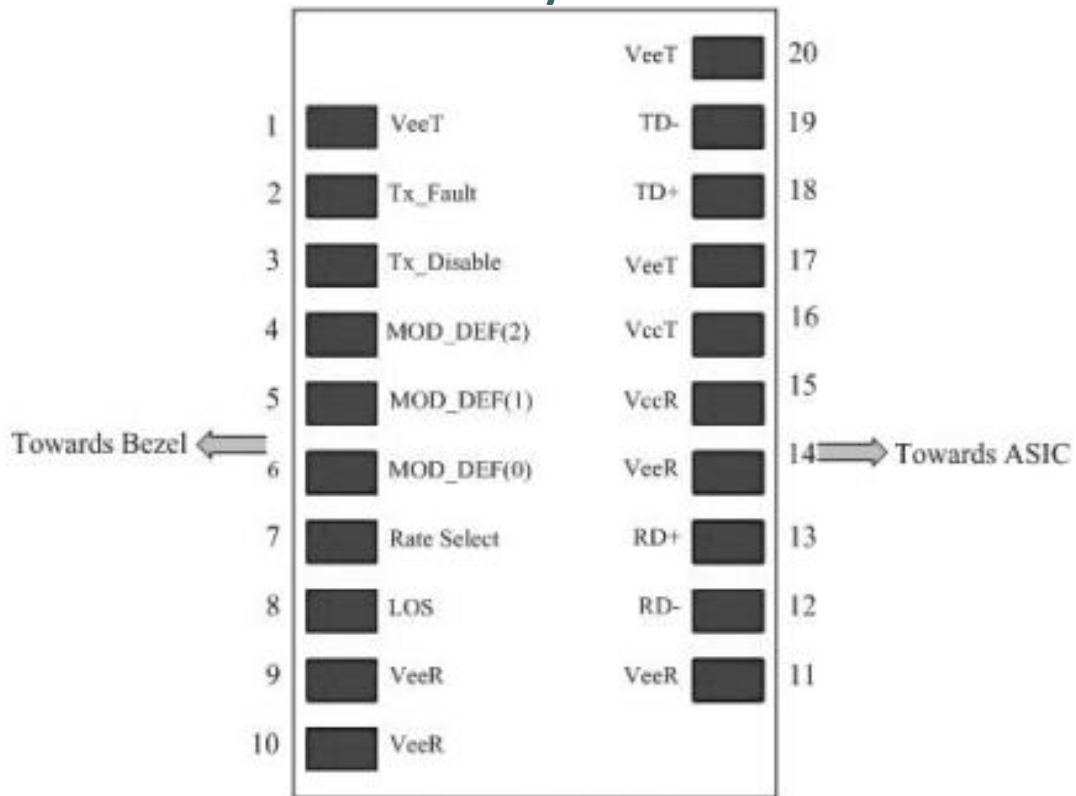
Parameter	Unit	Min.	Typ.	Max
<b>Transmitter</b>				
Output Optical Power	dBm	-15		-8
Optical Extinction Ratio	dB	8.2		
Optical Wavelength	nm	1260	1310	1360
Spectral Width	nm			5
Side Mode Suppression Ratio	dB			
<b>Receiver</b>				
Optical Center Wavelength	nm	1260		1600
Receiver Sensitivity @	dBm	-23		-8
Receiver Sensitivity @	dBm			
LOS DE-Assert	dBm			-24
LOS Assert	dBm	-45		

### Laser Safety

This is a class 1 Laser Product according to IEC 60825-1:1993:+A1:1997+A2:2001. This product complies with 21 CFR 1040.10 and 1040 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

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### PIN Layout

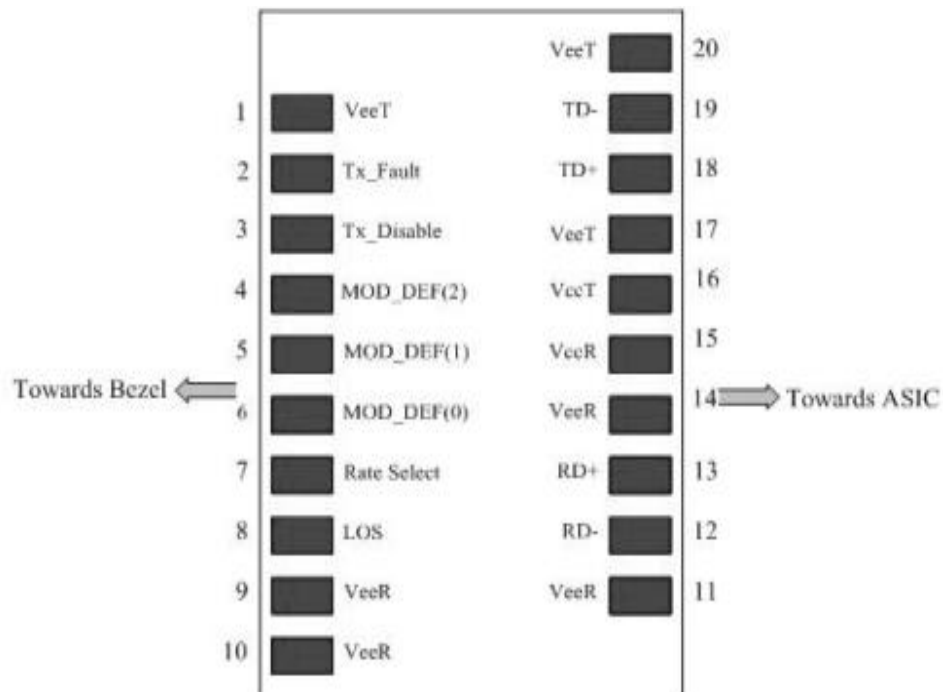
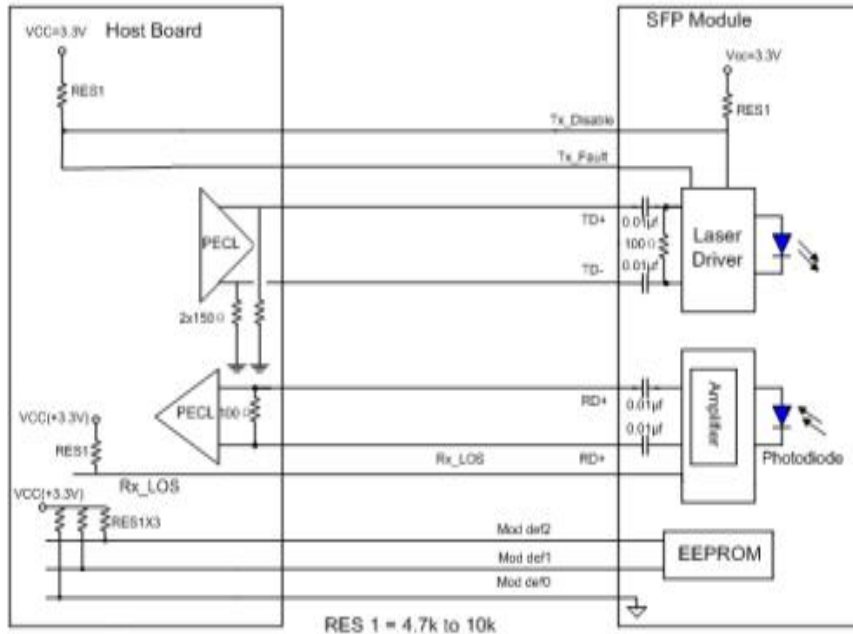


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### PIN Functions

Pin #	Name - Description
1	Transmitter Ground
2	Transmitter Fault Indication
3	Transmitter Disable - Module disables on high or open
4	Module Definition 2 - Data line for Serial ID
5	Module Definition 1 - Clock line for Serial ID
6	Module Definition 0 - Grounded within the module.
7	Function not available
8	Loss of Signal
9	Receiver Ground
10	Receiver Ground
11	Receiver Ground
12	Inv. Received Data Out
13	Received Data Out
14	Receiver Ground
15	Receiver Power
16	Transmitter Power
17	Transmitter Ground
18	Transmit Data In
19	Inv. Transmit Data In
20	Transmitter Ground
21	
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### SFP 2 km transceiver | Cisco Compatible 622Mb SONET OC-12 / STM-4 Mechanical Layouts



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