

SFP 80 km transceiver | Cisco Compatible 1G ZX Ethernet

Designed for OEM networks such as Cisco, HP, Juniper, Brocade, Alcatel etc.

Datasheet

SFP Optical Transceiver Product Features

- Exclusive Japanese OSAs for Ultimate Reliability
- 1000BASE-ZX Ethernet 24dB SFP
- 80 km ZX SFP for SMF @ 1.25Gbps
- 1550nm DFB+PIN Laser 80 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-11DT55K080



- 1.25Gbps Gigabit Ethernet
- Fibre Channel 1x

Applications

• Other Optical Links

Description

Platinum OEM Series PSFP-11DT55K080 is a Cisco Compatible Duplex 1000BASE-ZX Ethernet SFP transceiver designed for long distance optical communications up to 80 km with signaling rates up to 1.25Gbps.

OptoSpan Platinum OEM Series 1.25Gbps 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 80 km Platinum OEM SFP Optical Transceiver

PSFP-11DT55K080	Distance: 80 km				Fiber: 1550nm SMF	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	0	5	-24	-3		
Optical Calculation Results			-23.40	-18.40	23.40	24



SFP 80 km transceiver | Cisco Compatible 1G ZX Ethernet General Specifications

Parameter	Unit	Min.	Тур.	Max
Ab	solute Maximu	m Ratings	•	
Maximum Supply Voltage	V	-0.5		3.6
Storage Temperature	oC	-40		+85
Case Operating Temperature	oC	0		+70
Recommended Operating Condition				
Supply Voltage	V	3.15	3.3	3.45
Supply Current	mA			300
Data Rate	Gbps		1.25	

Electrical Characteristics

Parameter	Unit	Min.	Тур.	Max
	Transmitt	er		
Differential Input Voltage Swing	mVpp	500		2400
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
Receiver				
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

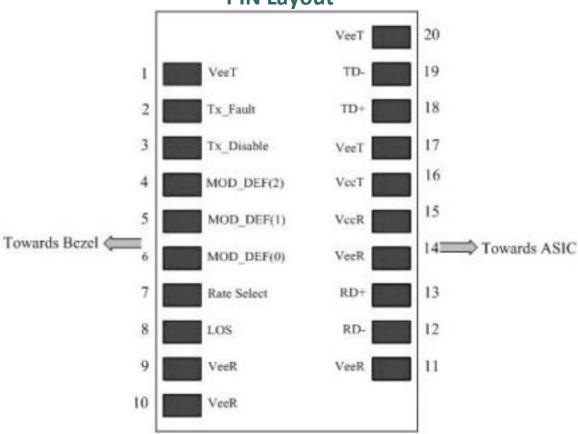
Parameter	Unit	Min.	Тур.	Max
	Transmitt	er		
Output Optical Power	dBm	0		5
Optical Extinction Ratio	dB	9		
Optical Wavelength	nm	1500	1550	1580
Spectral Width	nm			1
Side Mode Suppression Ratio	dB	30		
Receiver				
Optical Center Wavelength	nm	1260		1600
Receiver Sensitivity @ 1.25Gbps	dBm	-24		-3
LOS DE-Assert	dBm			-25
LOS Assert	dBm	-42		

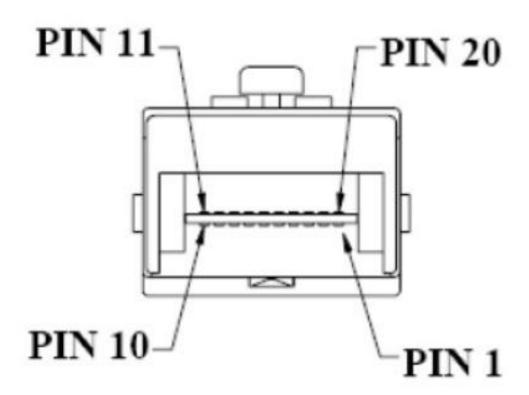
Laser Safety

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.



SFP 80 km transceiver | Cisco Compatible 1G ZX Ethernet PIN Layout





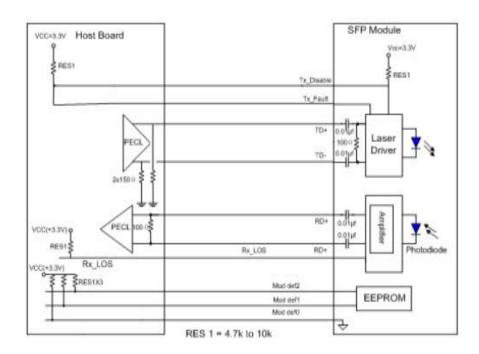


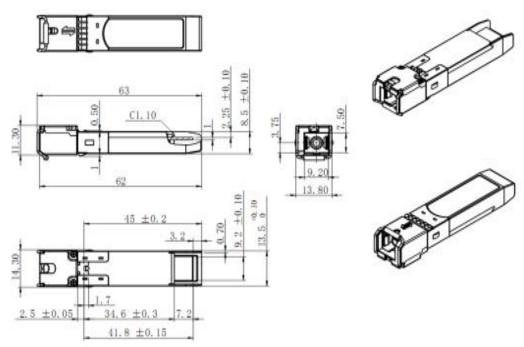
SFP 80 km transceiver | Cisco Compatible 1G ZX Ethernet PIN Functions

Pin # Name - Description 1 Transmitter Ground 2 Transmitter Disable 4 Module Definition 2 5 Module Definition 0 7 Not Connect 8 Loss of Signal 9 Receiver Ground 10 Receiver Ground 11 Receiver Ground 12 Inv. Received Data Out 13 Receiver Ground 14 Receiver Ground 15 Receiver Ground 16 Transmitter Power 17 Transmitter Fower 17 Transmitter Ground 18 Transmitter Ground 20 Transmitter Ground 21 Inv. Transmitter Ground 22 2 2 3 2 4 25 26 27 28 29 30	D: #	Name Description
Transmitter Fault Indication Transmitter Disable Module Definition 2 Module Definition 0 Not Connect Loss of Signal Receiver Ground In Receiver Ground Inv. Received Data Out Receiver Ground Receiver Ground Receiver Ground Transmitter Power Transmitter Power Transmitter Ground Transmit Data In Inv. Transmit Data In Inv. Transmitter Ground Transmit Data In Transmitter Ground	Pin #	Name - Description
3 Transmitter Disable 4 Module Definition 2 5 Module Definition 0 7 Not Connect 8 Loss of Signal 9 Receiver Ground 10 Receiver Ground 11 Receiver Ground 11 Receiver Bound 12 Inv. Received Data Out 13 Receiver Ground 15 Receiver Ground 16 Transmitter Power 17 Transmitter Ground 18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29		Transmitter Ground
4 Module Definition 2 5 Module Definition 0 7 Not Connect 8 Loss of Signal 9 Receiver Ground 10 Receiver Ground 11 Receiver Ground 12 Inv. Received Data Out 13 Receiver Ground 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 22 23 24 25 26 27 28 29	2	Transmitter Fault Indication
5 Module Definition 0 6 Module Definition 0 7 Not Connect 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 22 23 24 25 26 27 28 29	3	Transmitter Disable
6 Module Definition 0 7 Not Connect 8 Loss of Signal 9 Receiver Ground 10 Receiver Ground 11 Receiver Ground 11 Received Data Out 13 Received Data Out 14 Receiver Ground 15 Receiver Ground 16 Transmitter Power 17 Transmitter Ground 18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	4	Module Definition 2
7 Not Connect 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 22 23 24 25 26 27 28 29	5	Module Definition 1
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 22 23 24 25 26 27 28 29	6	Module Definition 0
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 22 23 24 25 26 27 28 29	7	Not Connect
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 22 23 24 25 26 27 28 29	8	Loss of Signal
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 22 23 24 25 26 27 28 29	9	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 22 23 24 25 26 27 28 29	10	Receiver Ground
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 22 23 24 25 26 27 28 29	11	Receiver Ground
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 22 23 24 25 26 27 28 29	12	Inv. Received Data Out
15 Receiver Power 16 Transmitter Power 17 Transmitter Ground 18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	13	Received Data Out
16 Transmitter Power 17 Transmitter Ground 18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	14	Receiver Ground
17 Transmitter Ground 18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	15	Receiver Power
18 Transmit Data In 19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	16	Transmitter Power
19 Inv. Transmit Data In 20 Transmitter Ground 21 22 23 24 25 26 27 28 29	17	Transmitter Ground
20 Transmitter Ground 21 22 23 24 25 26 27 28 29	18	Transmit Data In
21 22 23 24 25 26 27 28 29	19	Inv. Transmit Data In
22 23 24 25 26 27 28 29	20	Transmitter Ground
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SFP 80 km transceiver | Cisco Compatible 1G ZX Ethernet Mechanical Layouts





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