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### **Platinum OEM Series**

SFP Single Fiber 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 26dB SFP
- 80 km ZX SFP for SMF @ 1.25Gbps
- 1550Tx-1490Rx DFB 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

#### **Description**

Platinum OEM Series PSFP-11DB55K080 is a Cisco Compatible Single Fiber BiDirectional 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 Single Fiber BiDirectional (BiDi) 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 Single Fiber BiDirectional (BiDi) transceivers with LC interface.

PSFP-11DB55K080	Distance: 80 km				Fiber: 1550Tx-1490Rx	
	Tx Min dBm	Tx Max dBm	Rx Min dBm	Rx Max dBm	Link Attenuation dB	Power Budget dB
Product Specifications	0	5	-26	-3		
<b>Optical Calculation Results</b>			-25.5	-19.5	23.5	26

#### **Optical Budget Calculation for 80 km Platinum OEM SFP Optical Transceiver**

# Applications

#### PSFP-11DB55K080



- 1.25Gbps Gigabit Ethernet
- Fibre Channel 1x
- Optical Fast Ethernet
- Other Optical Links

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### **Platinum OEM Series**

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

General Specifications				
Parameter	Unit	Min.	Тур.	Max
Absolute Maximum Ratings				
Maximum Supply Voltage	V	-0.5		3.6
Storage Temperature	°C	-40		+85
Case Operating Temperature	°C	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
Transmitter				
Differential Input Voltage Swing	mVpp	400		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
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



#### SFP Single Fiber 80 km transceiver | Cisco Compatible 1G ZX Ethernet

#### **Optical Characteristics**

Parameter	Unit	Min.	Тур.	Max
	Transmitt	er		
Output Optical Power	dBm	0		5
Optical Extinction Ratio	dB	9		
Optical Wavelength	nm	λс-6.5	λс	λc+7
Spectral Width	nm			1
Side Mode Suppression Ratio	dB	30		
Receiver				
Optical Center Wavelength	nm	λ-20	λ	λ+20
Receiver Sensitivity @ 1.25	dBm	-26		-3
LOS DE-Assert	dBm			-27
LOS Assert	dBm	-45		

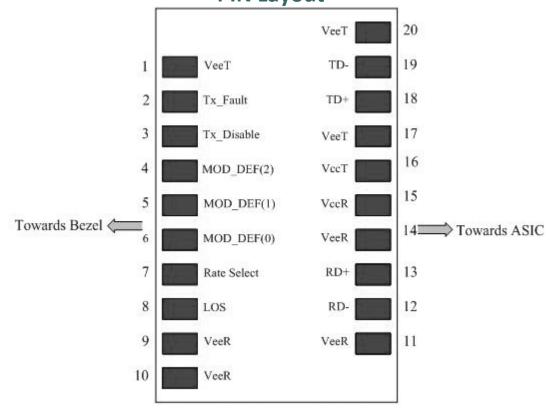
#### **Laser Safety**

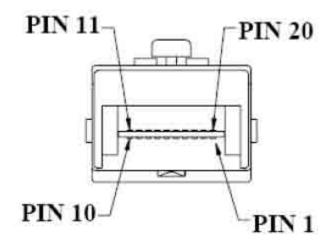
This is a class 1 Laser Product according to IEC 60825-1:1993:+A1:1997+A2:2001. This product complies with 21 CFR 1040.10 and 1040 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

### **Platinum OEM Series**

## SFP Single Fiber 80 km transceiver | Cisco Compatible 1G ZX Ethernet

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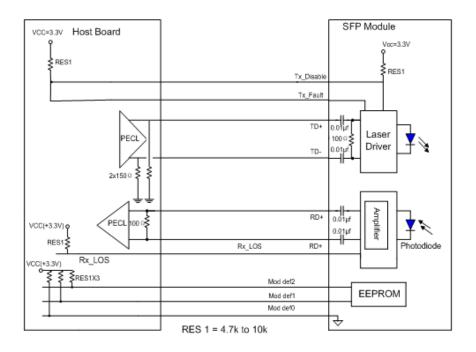
#### SFP Single Fiber 80 km transceiver | Cisco Compatible 1G ZX Ethernet PIN Functions

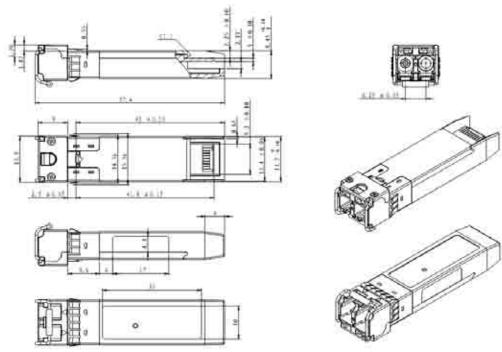
Pin #	Name - Description
1	Transmitter Ground
2	Transmitter Fault Indication
3	Transmitter Disable
4	Module Definition 2
5	Module Definition 1
6	Module Definition 0
7	Not Connected
8	Loss of Signal
9	Receiver Ground
10	Receiver Ground
11	Receiver Ground
12	Inv. Received Data Out
13	Received Data Out
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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### **Platinum OEM Series**

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#### SFP Single Fiber 80 km transceiver | Cisco Compatible 1G ZX Ethernet Mechanical Layouts





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