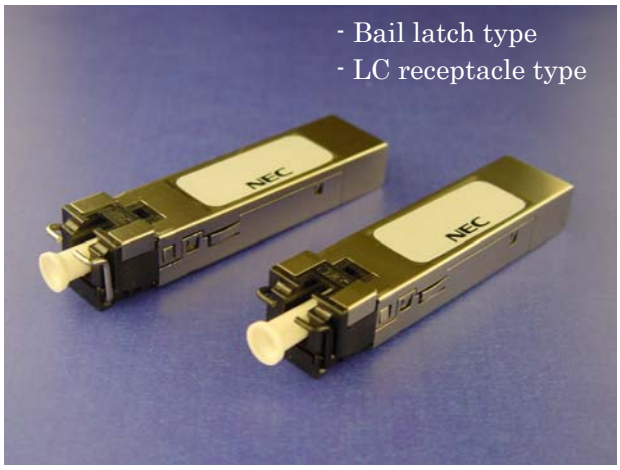
Empowered by Innovation NEC

OD-BP1221

1.25Gbps 1.3µm/1.5µm WDM Bi-directional SFP Transceiver

FEATURES

- Single fiber Bi-directional Optical Transceiver consists of
  - *Transmitter*
  - *Receiver with 2R function*
  - *1.3/ 1.5µm WDM function using Planar Lightwave Circuit (PLC)*
- SFP Transceiver MSA
- 1.25Gbps Data Rates
- Loss of Signal (LOS) function
- Transmitter disable (TX_DISABLE) function
- Single Power Supply Voltage of +3.3V
- Differential AC100 ohms Data Input/Output
- Hot-pluggable electrical interface
- Serial identification
- LC and SC receptacle
- Bail latch type and Lever latch type
- Lead-free and RoHS compliant
- Applied to Gigabit Ethernet



OPERATING CONDITIONS

Parameter	Unit	Values			Remarks
		Min.	Typ.	Max.	
Case Temperature	°C	0	–	+ 70	-1xxxx
		-5	–	+ 85	-2xxxx
		-40	–	+ 85	-3xxxx
Power Supply Voltage	V	+ 3.135	+ 3.300	+ 3.465	
Power Supply Current	mA	–	–	300	

PRODUCT INFORMATION

OD-BP1221-x x x x x

- Temperature
  1 : 0 ~ +70°C
  2 : -5 ~ +85 °C
  3 : -40 ~ +85 °C
- Transmitter wavelength
  3 : 1.3µm band
  5 : 1.5µm band
- Loss budget
  S : 11dB
  M : 15dB
  L : 20dB
- Connector
  L : LC receptacle
  E : SC receptacle
- Latch structure
  4 : Lever Latch
  6 : Bail Latch

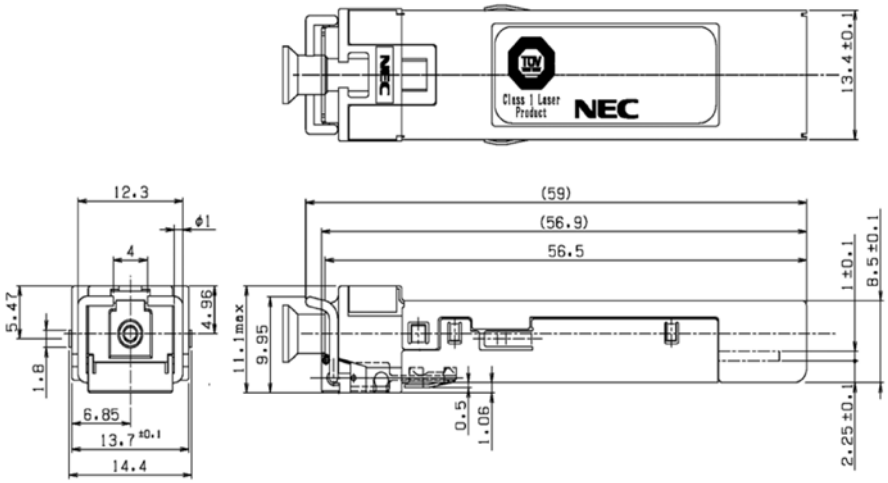
PERFORMANCE

Parameter	Unit	OD-BP1221					
		x3Sxx	x3Mxx	x3Lxx	x5Sxx	x5Mxx	x5Lxx
		1.3μm Tx / 1.5μm Rx			1.5μm Tx / 1.3μm Rx		
Bit rate	Gbps	1.250					
TRANSMITTER							
Laser Diode type	–	MLM-LD	SLM-LD				
Wavelength	nm	1260 ~ 1360	1290 ~ 1330		1480 ~ 1500		
Spectral width (RMS)	nm	(≤ 3.5)*	–				
Spectral width (-20dB)		–	≤ 0.88				
Mean output power	dBm	–9 ~ –3	–5 ~ 0	–3 ~ +2	–9 ~ –3	–5 ~ 0	–3 ~ +2
Extinction ratio	dB	≥ 9.0			≥ 9.0		
Transmitter disable (TX_DISABLE)	–	Optical output enable = Low Level Optical output disable= High Level or Open circuit					
RECEIVER							
Wavelength	nm	1480 ~ 1500			1260 ~ 1360	1290 ~ 1330	
2R sensitivity	dBm	≤ –20	≤ –20	≤ –23	≤ –20	≤ –20	≤ –23
2R overload	dBm	≥ –3	≥ 0	≥ 0	≥ –3	≥ 0	≥ 0
Loss of Signal (LOS)	–	Normal Operation = Low Level Fault Condition = High Level					

**) Comply with IEEE802.3ah, Figure 59-3*

DIMENSIONS (Unit:mm)

(LC receptacle / Bail Latch type (-xxxL6))



Pin description

Top of Transceiver		Bottom of Transceiver	
20	VEET	1	VEET
19	TD-	2	TX_FAULT
18	TD+	3	TX_DISABLE
17	VEET	4	MOD_DEF(2)
16	VCCT	5	MOD_DEF(1)
15	VCCR	6	MOD_DEF(0)
14	VEER	7	NC
13	RD+	8	LOS
12	RD-	9	VEER
11	VEER	10	VEER

** : Rate Select function is not implemented.*

DATA SUBJECT TO CHANGE WITHOUT NOTICE

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