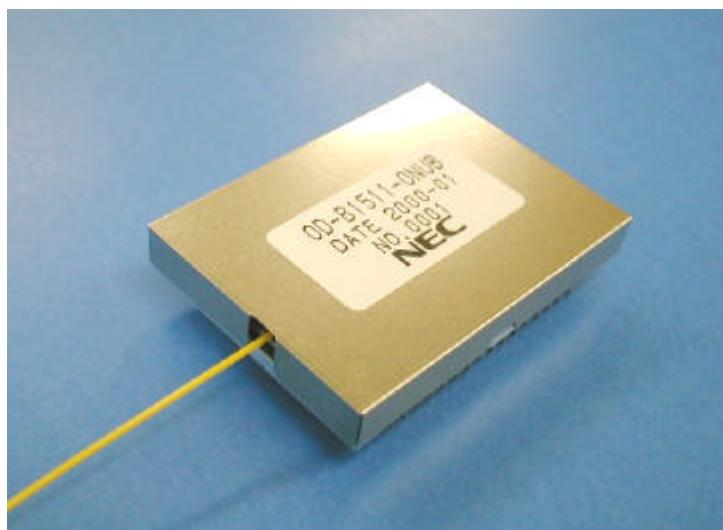


# OD-B1511-ONUB /-ONUC

**156Mbps(downstream)/156Mbps(upstream)  
PON Optical Transceiver Module for ONU**

## FEATURES

- Full Compliance with ITU-T G.983.1 ClassB/C for Single Fiber Bi-directional Transmission.
- Applied to **ONU**(*Optical Network Unit*) located on Subscriber Side.
- Compact integrated Transceiver consists of
  - 1.3μm Burst-mode Transmitter with Feed forward APC Circuit by use of ROM.
  - 1.5μm Continuous-mode Receiver with Clock & Data recovery function.
  - 1.3/1.5μm WDM function by **Planar Lightwave Circuit (PLC)**.
- Optical output alarm (Tx ALM)
- Optical output shutdown (Shutdown)
- Optical input loss detection (Rx ALM)



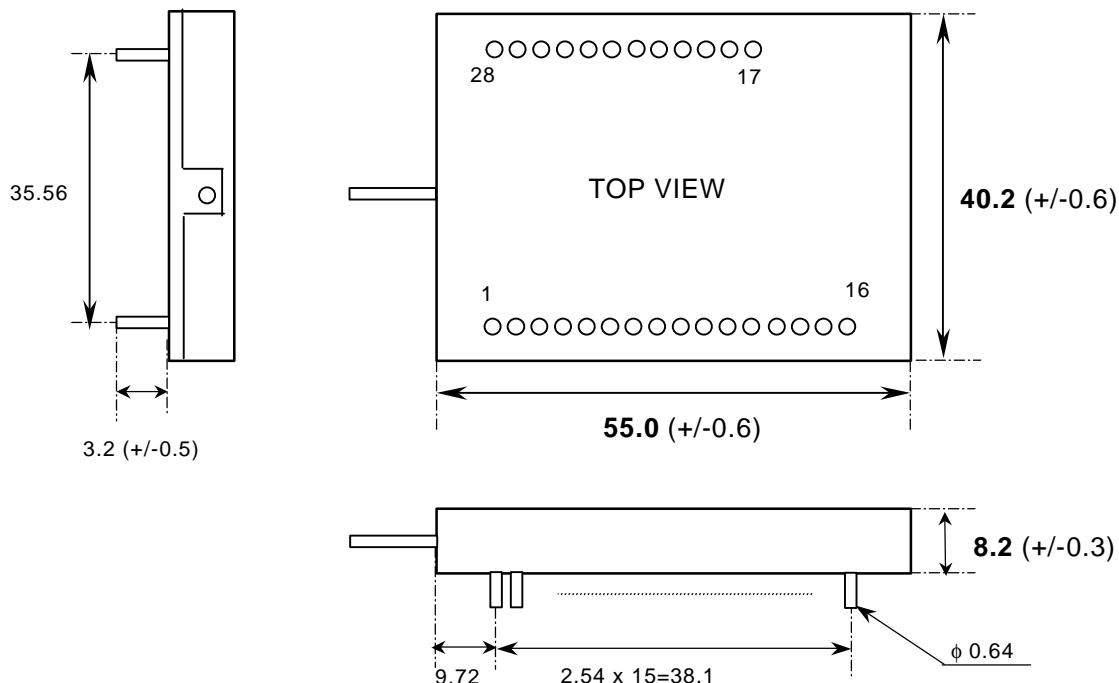
## OPERATING CONDITIONS

Parameter	Unit	Values		
		Min.	Typ.	Max.
Ambient Temperature	°C	- 40	-	+ 85
Power Supply Voltage	V	+ 3.14	+ 3.30	+ 3.46
Power Supply Current	mA	-	200	350

# PERFORMANCE

Parameter	Unit	OD-B1511-ONUB	OD-B1511-ONUC
Bit Rate	Mbps	155.52	
TRANSMITTER (Burst-mode)			
Laser Diode type	—	FP-LD	
Center Wavelength	nm	1260-1360	
Spectral Width(RMS)	nm	≤ 5.8	
Mean Output Power	dBm	– 4 to + 2	– 2 to + 4
Extinction Ratio	dB	≥ 10	
RECEIVER (Continuous-mode)			
Receive Wavelength	nm	1480-1580	
Photo Detector	—	PIN-PD	
Sensitivity	dBm	≤ – 30	≤ – 33
Overload	dBm	≥ – 8	≥ – 11
Optical output alarm	—	Normal operation : High level Transmitter fault condition : Low level	
Optical output shutdown	—	Optical output enable : High level Optical output shutdown : Low level	
Optical input loss detection	—	Normal operation : High level No optical input : Low level	

# DIMENSIONS (Unit:mm)



DATA SUBJECT TO CHANGE WITHOUT NOTICE

Sales Department, Fiber Optic Devices Division  
Optical Network Operations Unit, NEC Networks  
NEC Corporation  
1753 Shimonumabe, Nakahara-ku, Kawasaki, Kanagawa 211-8666, Japan  
Tel:+81-44-435-5412 Fax:+81-44-435-5109

<http://networks.nec.co.jp/on/dd/en/>

NEC Electronics (Europe) GmbH  
Sales and marketing of semiconductors across Europe  
Oberratherstr. 4, 40472 Dusseldorf, Germany  
Tel:+49-211-6503-979 FAX:+49-211-6503-358

USA&CANADA  
NEC FiberOptech, Inc.  
10050 North Wolfe Road, Suite SW1-290 Cupertino, CA 95014, USA  
Tel: +1-408-863-2000 Fax: +1-408-863-2019