

10G EPON Asymmetric OLT Transceiver XFP Module



RTXM266-500 product is designed for OLT module based on 10G EPON technology. The product is an integrated module containing a micro-optic component and semiconductor material. The module could implement DDM function. It could be used at key locations in optical networks.

Features

- XFP package with SC receptacle optical interface compliant
- Hot-Pluggable
- 10.3125Gbps&1.25Gbps downstream and 10Gbps&1.25Gbps upstream
- +3.3V single power supply
- ROHS Compliant

Applications

- Optical transceiver for 10G&1G/1G asymmetric EPON OLT

Standards

- IEEE 802.3av
- MSA SFF-8077iv4.5

Specifications

Parameter	Symbol	Unit	Value		
			Min	typical	Max
Electrical Characteristics					
Supply Current	I _{cc}	mA			1200
Optical transmitter Characteristics					
Launch Optical Power -10G	P _o	dBm	+2		+5
Center Wavelength Range -10G	λ _c	nm	1575	1577	1580
Extinction Ratio -10G	EX	dB	6		
Spectral Width(@-20dB) -10G	Δλ	nm			1
Side Mode Suppressing Ratio -10G	SMSR	dB	30		
Eye Diagram -10G	Complies with IEEE802.3av				
Dispersion Penalty -10G	-	dB			1.5
Launch Optical Power -1G	P _o	dBm	+2		+7
Center Wavelength Range -1G	λ _c	nm	1480	1490	1500
Extinction Ratio -1G	EX	dB	9		
Spectral Width(@-20dB) -1G	Δλ	nm			1
Side Mode Suppressing Ratio -1G	SMSR	dB	30		
Eye Diagram -1G	Complies with IEEE802.3ah				
Dispersion Penalty -1G	-	dB			2.3
Optical receiver Characteristics					
Receiver Sensitivity -1G (note1)	S	dBm			-29.78
Overload Input Optical Power -1G	P _{in}	dBm	-9.3		
Receiver Settling Time -1G		ns			400
. Measured with a PRBS 2 ⁷ -1 NRZ test pattern, @1.25Gb/s, EX=10dB, BER<10 ⁻¹² .					

Ordering Information

Part No	Specification								
	Package	Data rate	Laser	Power	Detector	Sensitivity	Temp	Reach	Other
RTXM266-500	XFP SC	10.3125&1.25	EML	+2~+5dBm	APD	< -29.78dBm	0~70°C	20km+	RoHS . DDM

10G EPON Asymmetric OLT Transceiver XFP Module

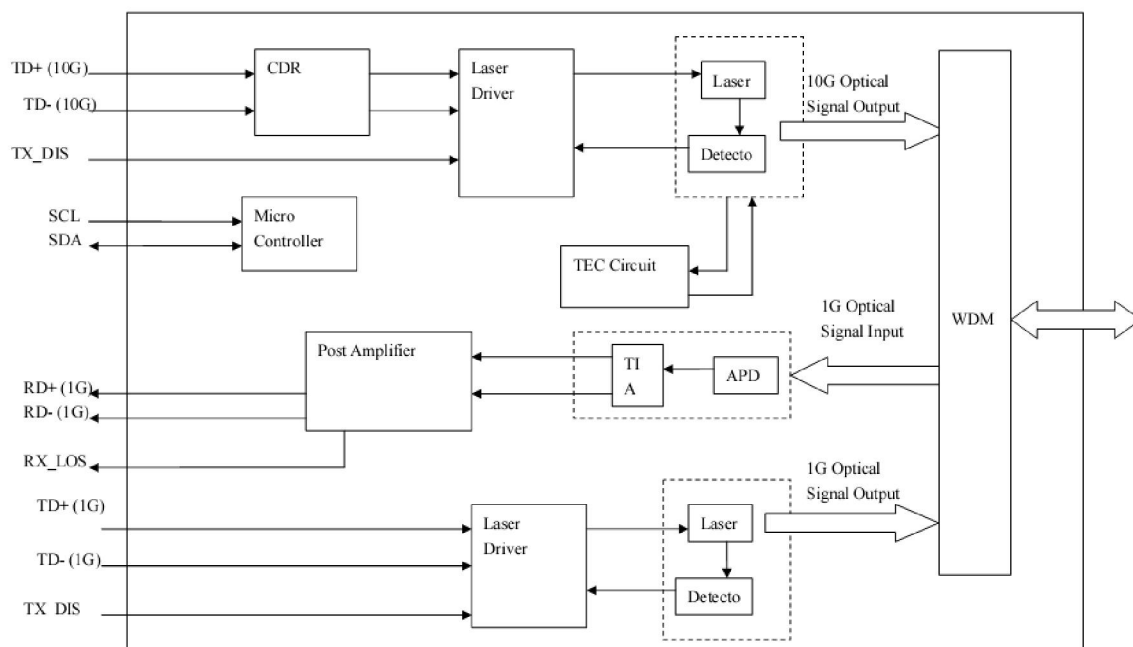
Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	oC	-40	+85
Relative Humidity	RH	%	5	95
Power Supply Voltage	Vcc	V	0	+3.6

Recommended Operating Conditions

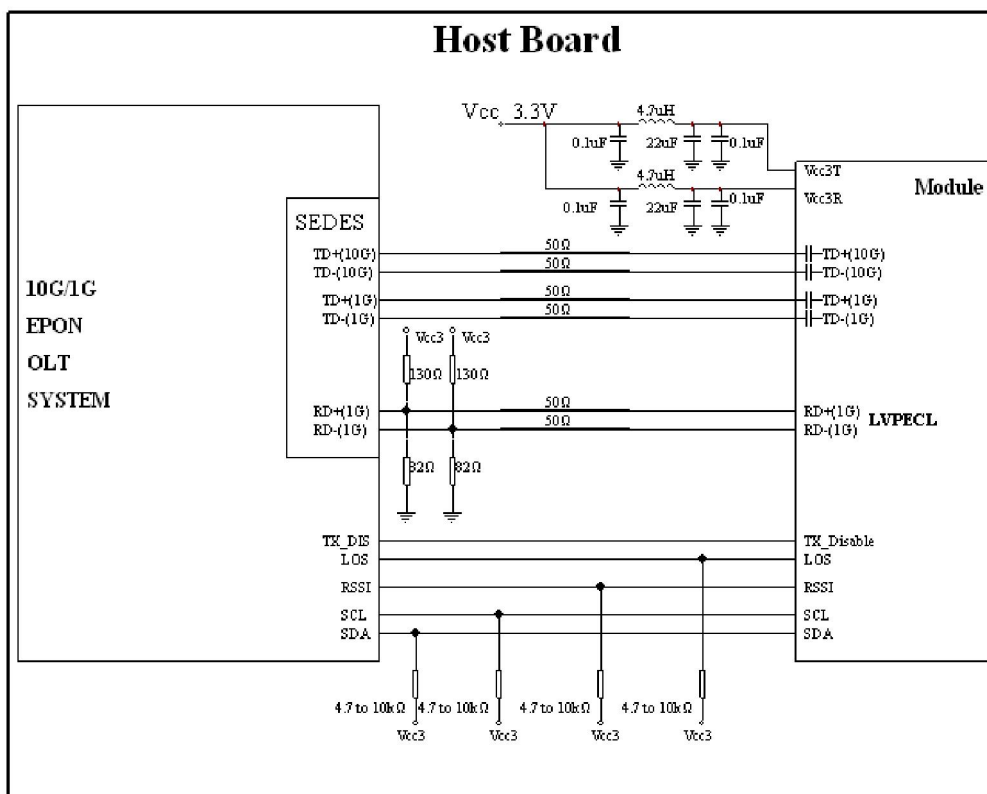
Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tc	oC	0	-	70
Power Supply Voltage	Vcc	V	3.13	3.3	3.47
Power Consumption	P	W			4

Principle diagram

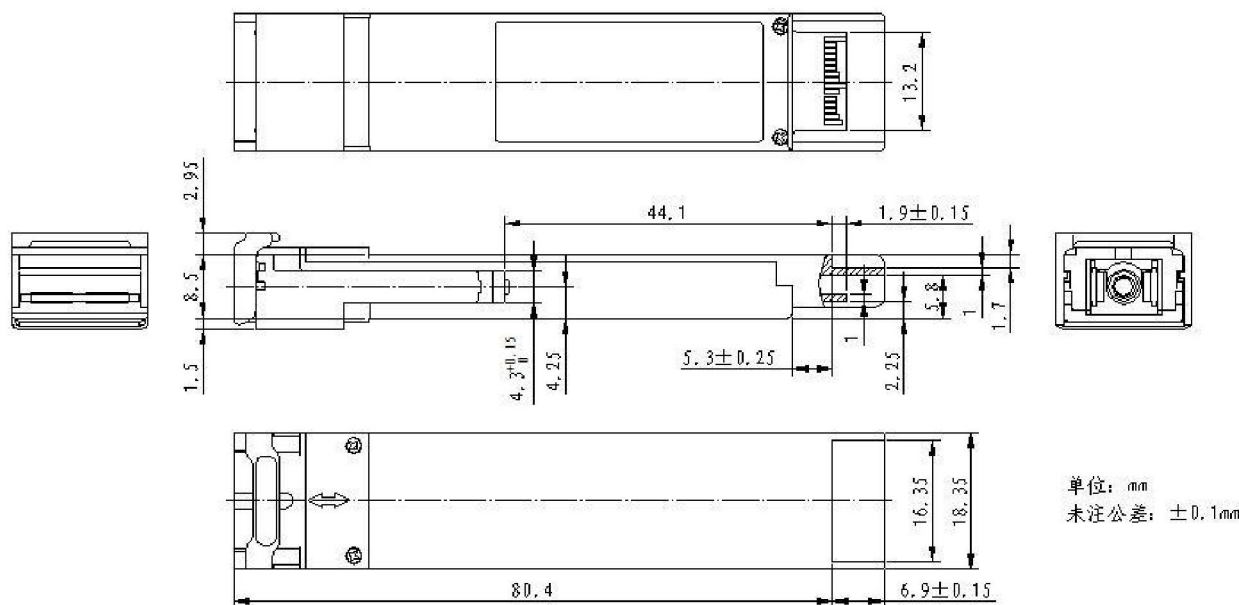


Electric Ports Definition

10G EPON Asymmetric OLT Transceiver XFP Module



Package Outline



Regulatory Compliance

Feature	Test Method	Performance
---------	-------------	-------------

10G EPON Asymmetric OLT Transceiver XFP Module

RoHS	BS EN 1122: 2001 US EPA METHOD 3050B US EPA METHOD 3052 US EPA METHOD 3060A	Pb <1000ppm Cr6+ <1000ppm Hg <1000ppm PBB <1000ppm PBDE <1000ppm Cd <100ppm
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7	Class 1 (>1.5kV) – Human Body Model
Electrostatic Discharge (ESD) Immunity	IEC61000-4-2	Class 2(>4.0kV)
Electromagnetic Interference (EMI)	CISPR22 ITE Class B FCC Class B CENELEC EN55022 VCCI Class 1	Compliant with standard
Immunity	IEC61000-4-3 Class 2	Typically show no measurable effect from a 3 V/m field swept from 80 to 1000MHz applied to the transceiver without a chassis enclosure.