

RTXM266-706 product is designed for OLT module based on XGSPON 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
- 9.953Gbps downstream
9.953Gbps upstream
2.488Gbps upstream
- +3.3V single power supply
- Internal Calibration
- ROHS Compliant

Applications

- Optical transceiver for XGSPON OLT N1

Standards

- ITU-T G.987
- MSA SFF-8077iv4.5

Specifications

Parameter	Symbol	Unit	Value		
			Min	typical	Max
Electrical Characteristics					
Supply Current	I _{cc}	mA			1200
Maximum Peak Current	-	mA			2000
Differential Input Swing (note1)	-	mV	120		1000
Differential Output Swing (note2)	-	mV	600		1000
Optical transmitter Characteristics					
Launch Optical Power	P _o	dBm	+2		+6
Center Wavelength	λ	nm	1575		1580
Extinction Ratio -10G	EX	dB	8.2		
Spectral Width(@-20dB)	Δλ	nm			1
Side Mode Suppressing Ratio	SMSR	dB	30		
Eye Diagram	Complies with G.987.2 (10% margin)				
Dispersion Penalty	-	dB			1.0
Pout @TX-Disable Asserted	P _{off}	dBm			-39
10G Optical receiver Characteristics					
Receiver Optical Wavelength	λ _{IN}	nm	1260		1330
Receiver Sensitivity (note3)	S BOL	dBm			-29.0
	S EOL				-28.0
Overload Input Optical Power	P _{in}	dBm	-5		
SD Assert		dBm			-30
SD De-assert		dBm	-45		
Hysteresis		dB	0.5		6
Receiver Settling Time		ns			400
Dynamic Range	-	dB	15		
2.5G Optical receiver Characteristics					
Receiver Optical Wavelength	λ _{IN}	nm	1260		1330
Receiver Sensitivity (note4)	S BOL	dBm			-28.5
	S EOL				-27.5
Overload Input Optical Power	P _{in}	dBm	-7		
SD Assert		dBm			-29.5
SD De-assert		dBm	-45		
Hysteresis		dB	0.5		6
Receiver Settling Time		ns			400

Dynamic Range	-	dB	15		
<ol style="list-style-type: none"> 1. AC coupled internally; 2. DC coupled internally; 3. Measured with a PRBS 2³¹-1 NRZ test pattern, @9.953Gb/s, EX=8.2dB, BER<10⁻³ 4. Measured with a PRBS 2²³-1 NRZ test pattern, @2.488Gb/s, EX=8.2dB, BER<10⁻⁴ 					

Ordering Information

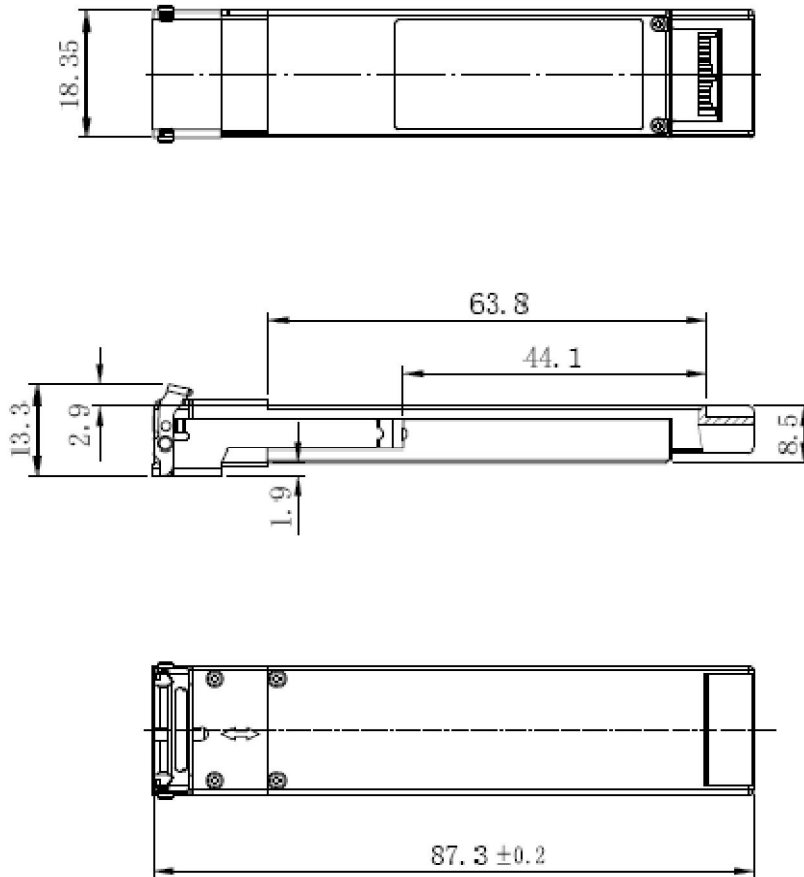
Part No	Specification								
	Package	Data rate	Laser	Power	Detector	Sensitivity	Temp	Reach	Center Wavelength(nm)
RTXM266-706	XFP SC	9.953/9.953&2.488	EML	+2~+6dBm	APD	< -28dBm	0~70°C	20km	1577nm

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			4.0



Unit: mm
 Unspecified
 Tolerance: $\pm 0.1\text{mm}$

Feature	Test Method	Performance
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.