

XG-PON1 OLT Optical Transceiver SFP+ Module

RTXM266-704 product is designed for OLT module based on XGPON N1 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.

Specifications

(tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Unit	Value		
			Min	typical	Max
Electrical Characteristics					
Power Consumption		W	-	-	1.8
LVPECL Single Ended Data Input Swing		mV	100	-	800
CML Single Ended Data Output Swing		mV	300		500
Differential Data input impedance			-	100	-
Signal Level(LVTTL)	VOH	V	2.4	-	Vcc
	VOL	V	0	-	0.8
Optical transmitter Characteristics					
Data Rate		Mbps	--	9953.28	-
Center Wavelength Range	c	nm	1575	-	1580
Spectral Width(@ -20dB)		nm	-	-	1
Launch Optical Power	P _o	dBm	+2	-	+6
Pout @ TX-Disable Asserted	P _{off}	dBm			-39
Extinction Ratio 1	EX	dB	8.2	-	-

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Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	T_s	$^{\circ}\text{C}$	-40	+85
Relative Humidity	RH	%	5	95
Power Supply Voltage	V_{cc}	V	0	+4
Receiver Damage Threshold		dBm	0	-

Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	T_c	$^{\circ}\text{C}$	-5	-	75
Power Supply Voltage	V_{cc}	V	3.135	3.3	3.465

Principle diagram



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Feature	Test Method	Performance
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7	Class 1 (>1.5kV) – Human Body Model
Electrostatic Discharge (ESD) Immunity	IEC 61000-4-2	LV4(Air discharge 15kV, Contact discharge 8kV) Performance criterion B
Electromagnetic Interference (EMI)	CISPR 22 ITE Class B EN 55022 Class B	Compliant with standards
Immunity	IEC 61000-4-3 Class 2 EN 55024	Typically show no measurable effect from a 3V/m field swept from 80 to 1000MHz applied to the transceiver without a chassis enclosure.
Eye Safety	FDA 21 CFR 1040.10 and 1040.11 UL TUV EN 60825-1	Compliant with Class 1 laser product