

Description

- RTXM330-201 is a 1310nm DFB based 25Gigabit SFP28 transceiver. It is designed to transmit and receiver optical data up to 10km over singlemode fiber . The Transceiver is compliant with SFF-8472, SFF-8402, SFF-8432 and applicable portions of SFF-8431. Digital diagnostics functions are available via a 2-wire serial interface, as specified in SFF-8472.



Features

- Up to 10 km transmission distance.
- LC-duplex connector
- Low power consumption <1.2W
- -40 to 85 operating case temperature range
- Single +3.3V±5% power supply
- Digital Monitoring SFF-8472 compliant

Applications

- 25Gbase-LR
- CPRI 5G

Standards

- SFF-8472
- SFF-8402
- SFF-8432
- SFF-8431

Ordering Information

PN	Package	Data rate	Laser	Detector	Sensitivity/dBm	Case Tep	Reach	Other
RTXM330-201	SFP+		1310nm DFB	PIN	< -11.4	-40~85°C	10km	DDM

Absolute Maximum Ratings

Storage Temperature Range	Ts	°C	-40	85
Relative Humidity	RH	%	0	95
Supply Voltage	V _{CC}	V	-0.3	4.0

Recommended Operating Conditions

Operating Case Temperature Range	Tc	°C	-40	85	
Power Supply Voltage	Vcc	V	3.14	3.3	3.46
Bit Rate	BR	Gb/s	25.78		
Max Supported Link Length	L	km	10		

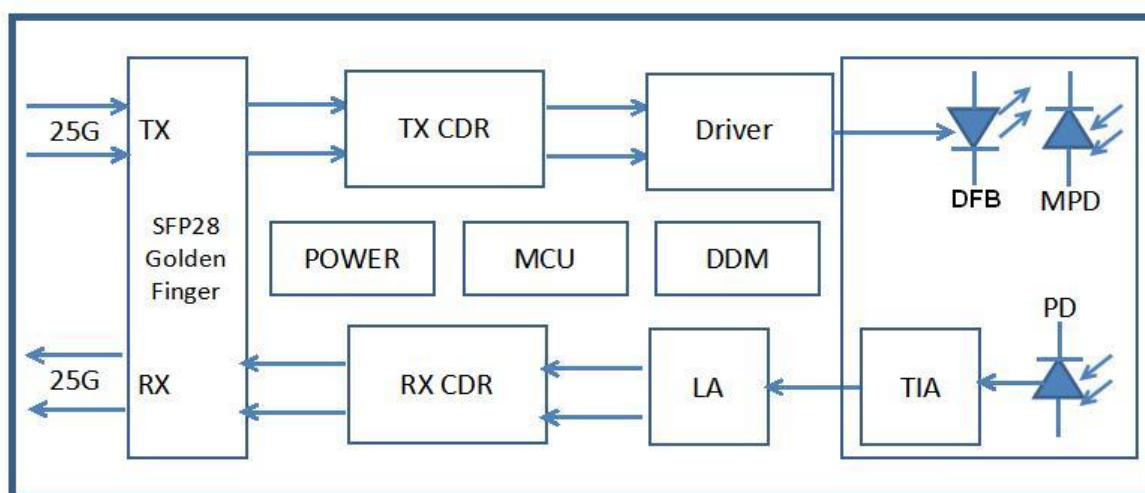
Optical Transmitter/Receiver Characteristics

(tested under recommended operating conditions, unless otherwise noted)

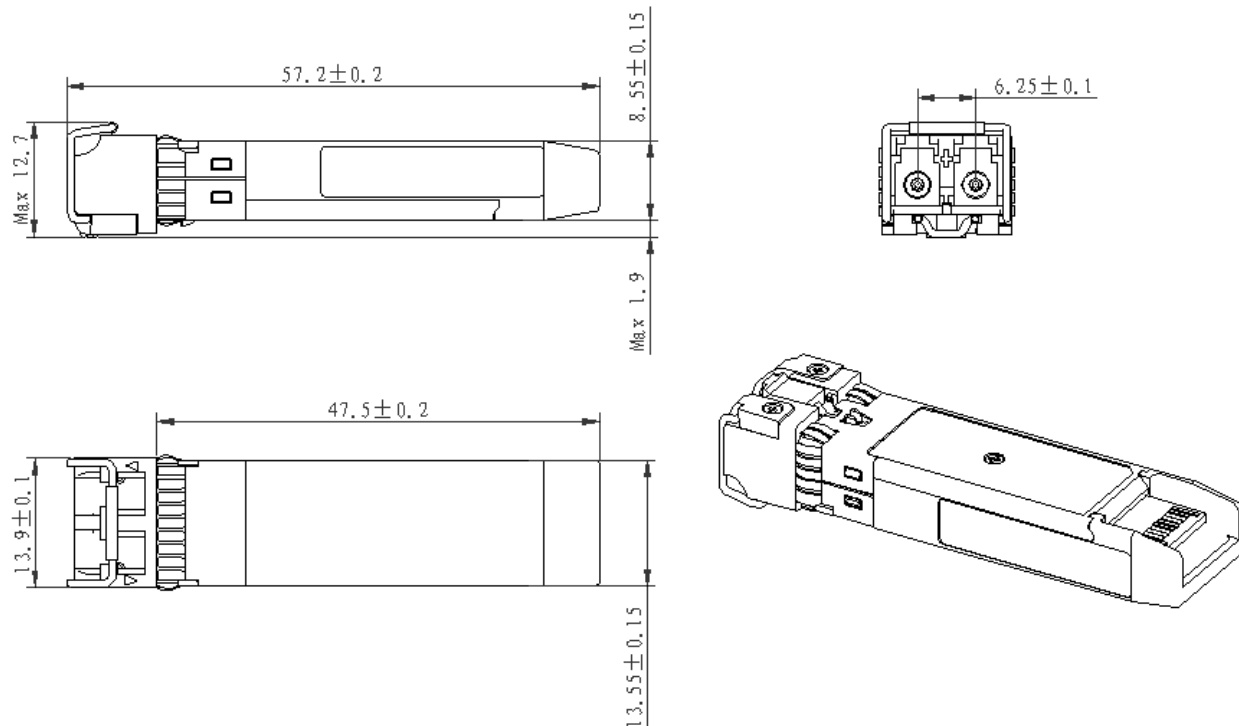
Parameter	Symbol	Unit	Min	Typ	Max	Note
Transmitter						
Nominal Wavelength	λ	nm	1295	1310	1325	
Side Mode Suppression Ratio	SMSR	dB	30			
Optical Modulation Amplitude	POMA	dBm	-4			
Optical Output Power	P _{av}	dBm	-4.5		2	
Extinction Ratio	ER	dB	3.5			
Transmitter and Dispersion Penalty	TDP	dB			2.7	
Average launch power of OFF transmitter	P _{OFF}	dBm			-30	
Receiver						
Center Wavelength	λ	nm	1260	1310	1360	
Overload		dbm			2	
Receiver Sensitivity(AVG)	R _{SENSE1}	dBm			-11.4	1
Assert LOS	LOS _A	dBm	-30			
De-Assert LOS	LOS _D	dBm			-17	
LOS Hysteresis		dB	0.5			

Sensitivity for 25.78G PRBS 2³¹-1 and BER better than or equal to

Diagram



Package Outline



Regulatory Compliance

Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883C Method 3015.7	Class 1 (> 1500 Volts)
Electrostatic Discharge (ESD) Immunity	Variation of IEC 61000-4-2	LV 4(Air discharge :15KV;Contact discharge:8 KV)
Electromagnetic Interference (EMI)	CISPR22 ITE Class B EN55022 Class B FCC Class B	Compliant with standards
Immunity	IEC61000-4-3 Class 2 EN55024	Typically show no measurable effect from a 3V/m field swept from 80 to 1000MHz applied to the transceiver without a chassis enclosure.

Revision History

Rev.	Date	Page	Description	Note
1.0	5/10/2017		The first released version	