

## Description

- RTX330-201 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°C to 85°C 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/Gbps	Laser	Optical Power/dBm	Detector	Sensitivity/dBm	Case Temp	Reach	Other
RTXM330-201	SFP+	25.78	1310nm DFB	-4.5 ~2	PIN	< -11.4	-40~85°C	10km	DDM

## Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	°C	-40	85
Relative Humidity	RH	%	0	95
Supply Voltage	V <sub>CC</sub>	V	-0.3	4.0

## Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tc	°C	-40		85
Power Supply Voltage	V <sub>CC</sub>	V	3.14	3.3	3.46
Bit Rate	BR	Gb/s		25.78	
Max Supported Link Length	L	km			10

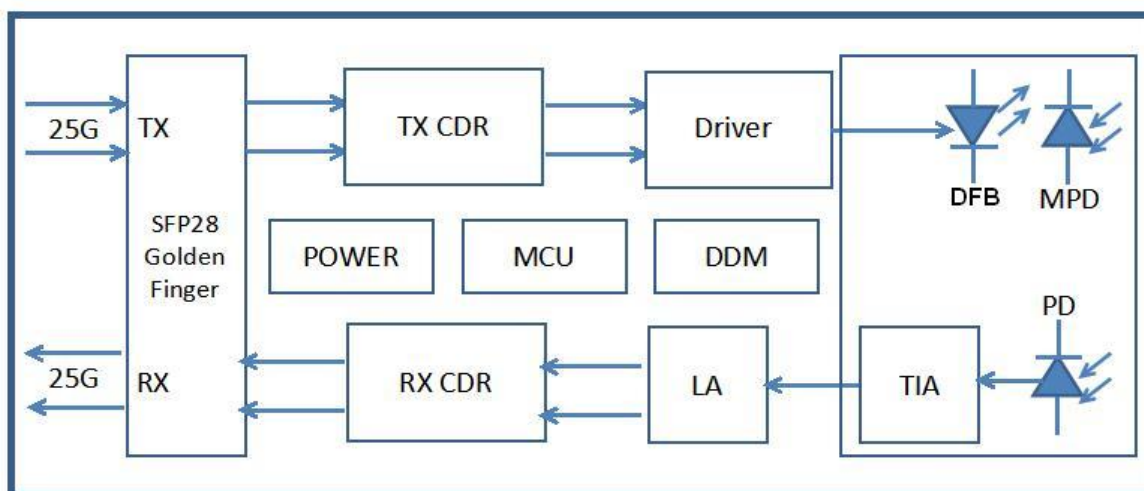
## Optical Transmitter/Receiver Characteristics

(tested under recommended operating conditions, unless otherwise noted)

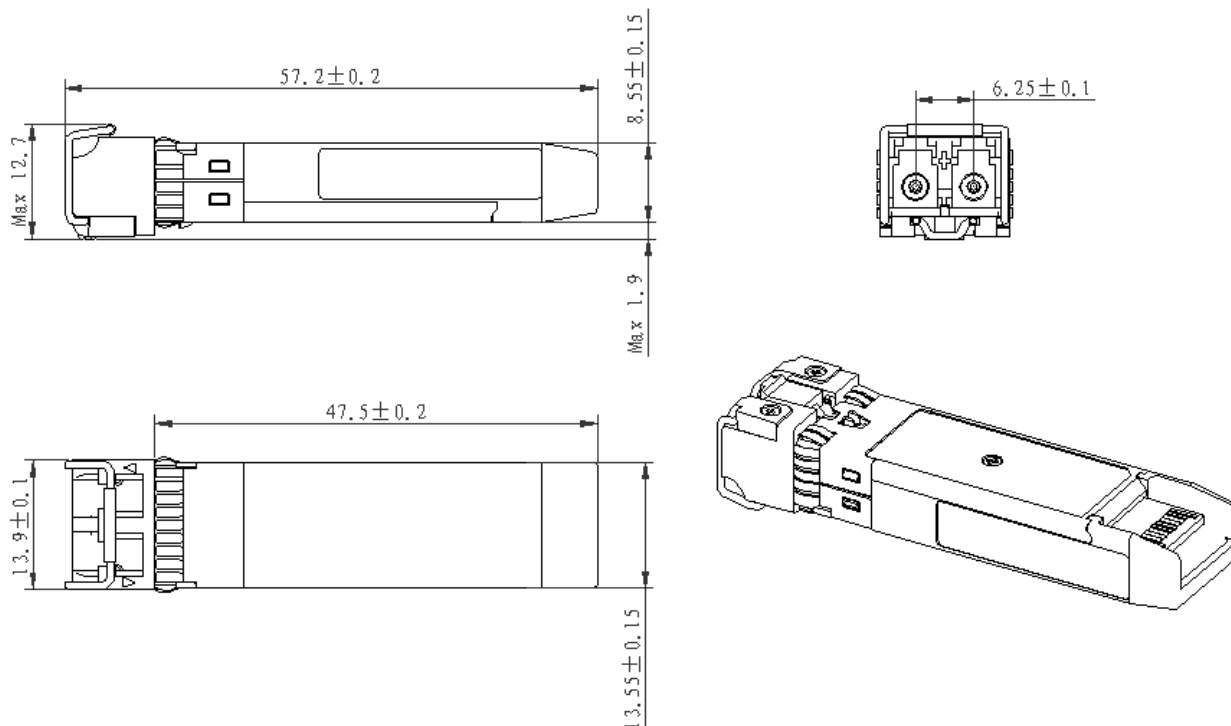
Parameter	Symbol	Unit	Min	Typ	Max	Note
Transmitter						
Nominal Wavelength	$\lambda$	nm	1295	1310	1325	
Side Mode Suppression Ratio	SMSR	dB	30			
Optical Modulation Amplitude	POMA	dBm	-4			
Optical Output Power	P <sub>av</sub>	dBm	-4.5		2	
Extinction Ratio	ER	dB	3.5			
Transmitter and Dispersion Penalty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

**Note 1:** Sensitivity for 25.78G PRBS 2<sup>31</sup>-1 and BER better than or equal to 10E-12, ER=4.8dB

## Diagram



## Package Outline



## Regulatory Compliance

Feature	Test Method	Performance
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	