



OSFP400G-XDR4

400GBASE, OSFP, DR4+, SMF TRANSCEIVER
1310nm, 2km REACH, MPO-12 CONNECTOR

Applications

- 400GBASE-DR4 Ethernet
- Switch & Router Connections
- Data Centers
- Other 400G Interconnect Requirements.

Absolute Maximum Ratings

Parameter	Symbol	Unit	Min	Max
Storage Temperature Range	Ts	°C	-40	85
Relative Humidity	RH	%	0	85
Power Supply Voltage	Vcc	V	-0.3	3.6

Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Operating Case Temperature Range	Tc	°C	0	/	70
Power Supply Voltage	Vcc	V	3.135	3.3	3.465
Bit Rate(Per channel)	BR	Gbps		53.125	

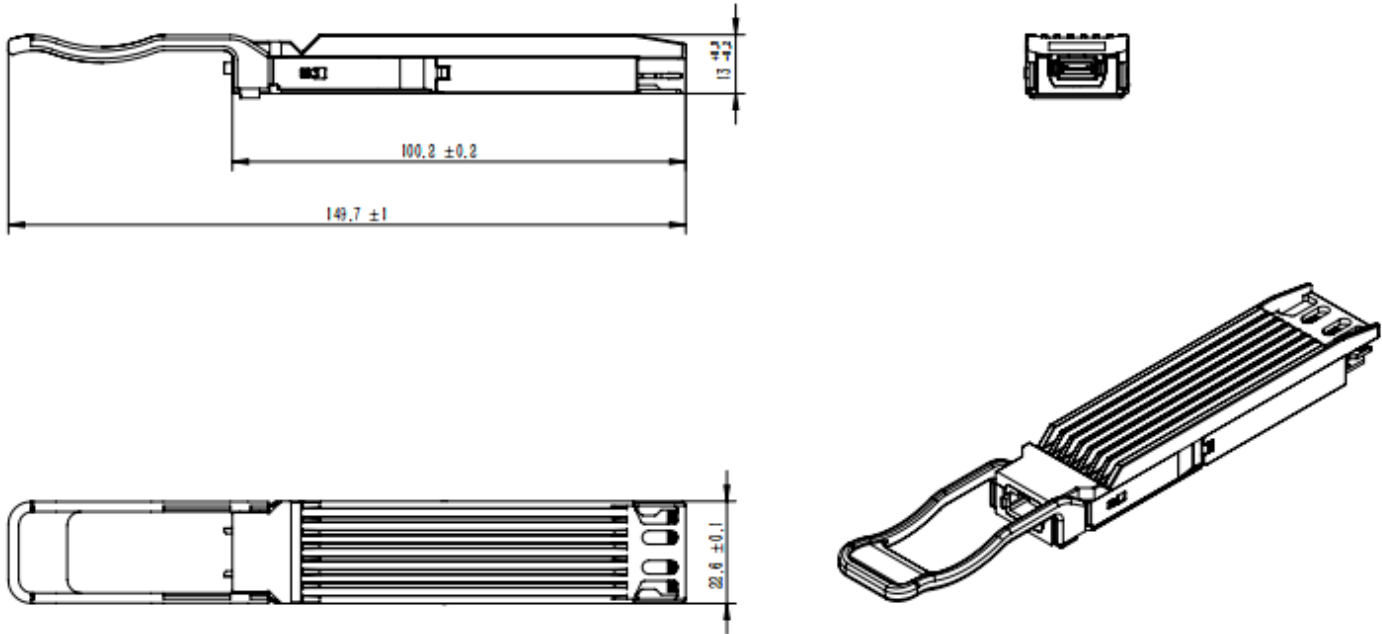
Transceiver Electrical Characteristics

Parameter	Symbol	Unit	Min	Typ	Max	Notes
Supply Voltage	VCC	V	3.135	3.3	3.465	
Supply Current	ICC	mA			3500	
Transmitter						
Data Rate	BR	GBd	26.5625± 100ppm			PAM4
TX_DISABLE High	VDH	V	2		3.5	Input Voltage High
TX_DISABLE Low	VDL	V	-0.3		0.8	Input Voltage Low
TX_FAULT High [assert]	VFH	V	2		3.5	Output Voltage High
TX_FAULT Low [negated]	VFL	V	-0.3		0.8	Output Voltage Low

Transceiver Electrical Characteristics						
Parameter	Symbol	Unit	Min	Typ	Max	Notes
Receiver						
Data Rate	BR	GBd	26.5625± 100ppm			PAM4
Differential Output Swing	VRXDIFF	mV	400		800	At TP4
Differential Eye Height	VEH	mV	228			
Los-Output Voltage High	VOH	V	2		3.5	Output Voltage High
Loss-Output Voltage Low	VOL	V	-0.3		0.8	Output Voltage Low

Optical Characteristics						
Parameter	Symbol	Unit	Min	Typ	Max	
Transmitter						
Signaling Speed per Lane		GBd	53.125± 100ppm			
Modulation Format				PAM4		
Center Wavelength		nm	1304.5	1310	1317.5	
Side-mode Suppression Ratio	SMSR	dB	30			
Optical Output Power	PAVG	dBm	-2.9		4	
Outer Optical Modulation Amplitude	OMAouter	dBm	-0.8			
Launch Power in OMAouter Minus TDECQ, Each Lane (min): for Extinction Ratio >= 4.5 dB		dBm	-2.2			
Launch Power in OMAouter Minus TDECQ, Each Lane (min): for Extinction Ratio < 4.5 dB		dBm	-1.9			
Transmitter and Dispersion Penalty Eye Closure for PAM4	TDECQ	dB			3.4	
Average Launch Power of Off Transmitter		dBm			-15	
Optical Extinction Ratio	ER	dB	3.5			
RIN17.1OMA		dB/Hz			-136	
Optical Return Loss Tolerance	ORL	dB			15.5	
Transmitter Reflectance		dB			-26	
Receiver						
Signaling Speed per Lane		GBd		53.125±		
100ppm						
Modulation format				PAM4		
Input Operating Wavelength		nm	1304.5	1310	1317.5	
Overload Input Optical Power		dBm	5			
Average receive Power per Lane		dBm	-5.9		4	
Receive Power (OMAouter)		dBm			4.2	
Receiver Sensitivity (OMAouter)		dBm			-3.9	
Stressed Receiver Sensitivity (OMAouter)		dBm			-1.9	

Mechanical Diagram



Note:

External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

Ordering Information

OEM	Part Number	OEM	Part Number
Arista	OSFP-400G-XDR4	MSA	AN-OSFP400G-XDR4

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