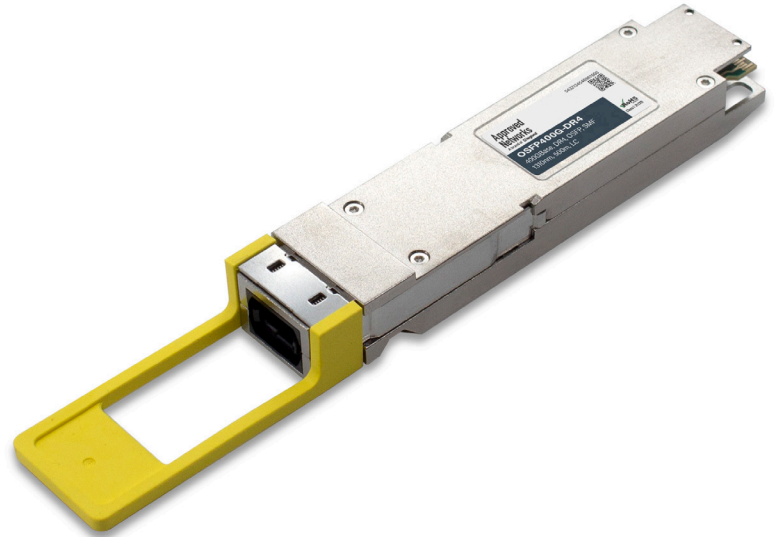


## Features

- Supports 425Gbps
- Single 3.3V Power Supply
- Power dissipation < 12W
- Up to 500m over SMF
- OSFP MSA Compliant
- 8x53.125GBd (PAM4) electrical interface
- MPO-12 connector
- Commercial case temperature range: 0°C to 70°C
- PIN and TIA array on the receiver side
- I2C interface with integrated Digital Diagnostic Monitoring
- Safety Certification: TUV/UL/FDA<sup>\*Note1</sup>
- RoHS Compliant



## Applications

- 4 x 100G-DR4 applications
- Data center

## 1. Absolute Maximum Ratings

\*Exceeding any one of these values may damage the device permanently.

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	Ts	-40	+85	°C
Supply Voltage	Vcc	-0.5	3.6	V
Damage threshold	Rxdmg	5		dBm

## 2. Recommended Operating Conditions

\* Power Supply specifications, Instantaneous, sustained and steady state current compliant with OSFP MSA Power Classification.

Parameter	Symbol	Min.	Typical	Max.	Unit
Operating Case Temperature	Tc	0		70	°C
Power Supply Voltage	Vcc	3.135	3.3	3.465	V
Operating Relative Humidity	RH	5		85	%
Power Dissipation	PD			12	W

### 3. Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit	Notes
<b>Transmitter</b>						
Differential data input swing per lane		900			mVp-p	
Differential input impedance	Zin	90	100	110	ohm	
Stressed input parameters						
Eye width		0.265			UI	@TP4, all 3 PAM4 eyes, 1E-5
DC common mode voltage		-350		2850	mV	
<b>Receiver</b>						
Differential output amplitude				900	mVp-p	
Differential output impedance	Zout	90	100	110	ohm	
Output Rise/Fall Time	tr/tf	9.5			ps	20%~80%
Eye width		0.265			UI	
Eye height differential		70			mV	@TP4, all 3 PAM4 eyes, 1E-5

### 4. Optical Characteristics

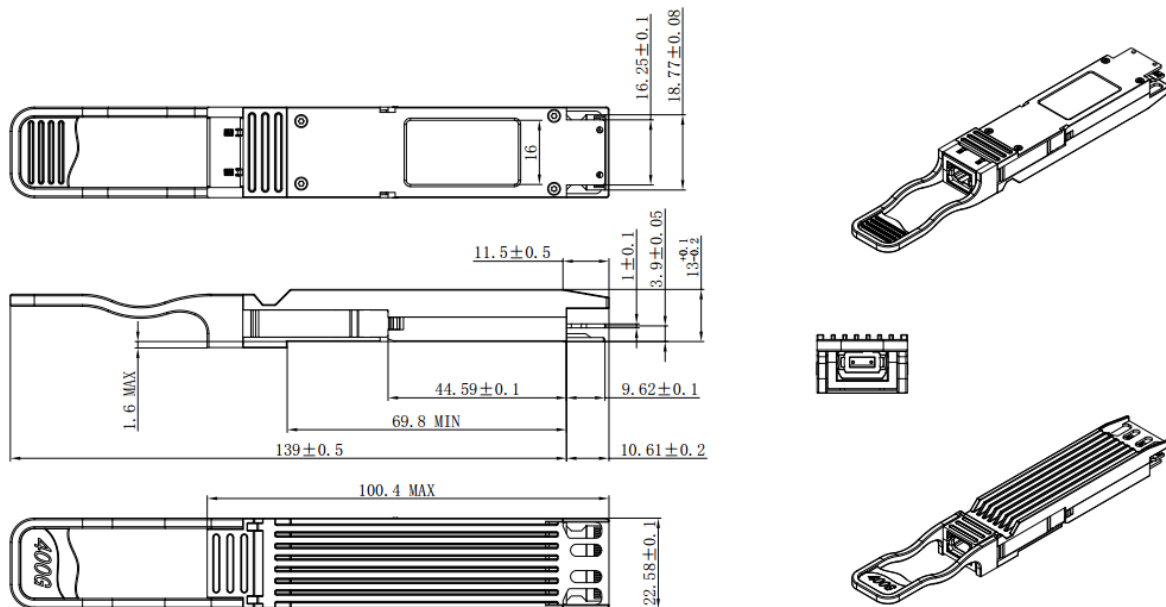
Parameter	Symbol	Min.	Typical	Max.	Unit
<b>Transmitter</b>					
Signaling speed per lane			106.25		Gbps
Modulation format		PAM4			
Center wavelength	$\lambda_C$	1304.5	1310	1317.5	nm
Side-mode Suppression Ratio	SMSR	30			dB
Extinction Ratio	ER	3.5			dB
Transmit OMA each lane	TxOMA	-0.8		4.2	dBm
Transmit average each lane <sup>4</sup>	TxAVG	-2.9		4	dBm
Launch Power in OMAouter minus TDECQ, each Lane		-2.2			dBm
Transmitter and dispersion eye closure, each lane	TDECQ			3.4	dB
Optical return loss tolerance <sup>5</sup>				21.4	dB

Receiver					
Signaling speed per lane			106.25		Gbps
Modulation format		PAM4			
Center wavelength	$\lambda$ C	1304.5	1310	1317.5	nm
Receive Power (OMA) each lane	RxOMA			4.2	dBm
Average receive power each lane	RxAVG	-5.9		4	dBm
Receiver sensitivity (OMAouter), each lane	SenOMA			-4.4	dBm
Receiver reflectance				-26	dB
LOS Assert	LOSA	-30			dBm
LOS De-Assert	LOSD			-12	dBm
LOS Hysteresis		0.5			dB

**Notes:**

1. Average launch power, each lane (min) is informative and not the principal indicator of signal strength. A transmitter with launch power below this value cannot be compliant; however, a value above this does not ensure compliance.
2. Transmitter reflectance is defined looking into the transmitter.

**5. 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.

## 6. Ordering Information

OEM	Part Number	OEM	Part Number
Arista	OSFP-400G-DR4-A		

## 7. Contact Information

Tel: 800.590.9535

Web: <http://www.approvednetworks.com>