

QSFP28 PSM4

100 Gbps Rate Transceiver, 1310nm, 2km over SMF

Description:

OPTOKON **100G QSFP28 PSM4** optical transceiver are designed for 2 km transmission on singlemode fibre (SMF). This QSFP28 optical module offers 4 independent transmit and receive channels, each capable of 25.78 Gbps operation for an aggregate data rate of 103.1 Gbps. The interface is via an MTP/MPO connector and proper alignment is ensured by the guide pins inside the receptacle.

Electrical connection for the 100G PSM4 module is achieved through an MSA-compliant 38-pin edge type connector and the module operates by a single +3.3V power supply. This module features a hot-pluggable electrical interface, low power consumption and MDIO management interface. The transceiver has been designed to meet the harshest external operating conditions including temperature, humidity and EMI interference.

The **QSFP28 100GBASE PSM4** transceiver is designed with form factor, optical/electrical connection and digital diagnostic interface according to the QSFP28 Multi-Source Agreement (MSA).



Features:

- Hot-pluggable QSFP28 form factor
- Support line rates 103.125 Gbps
- RoHS-6 compliant
- Single 3.3V power supply
- Up to 2km of Single Mode Fiber (SMF)
- 4x25G retimed electrical interface
- Parallel MPO receptacle
- I2C management interface
- Case operating temperature range: 0°C to 70°C
- Power dissipation < 3.5 W

Compliance and standards:

- Compliant to IEEE 802.3bm 100Gbase PSM4
- Compliant to SFF-8636
- OIF CEI-28G-VSR

Applications:

- 100G PSM4 applications with FEC
- Datacenter and enterprise networking

Recommended operating conditions:

<i>Parameter</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Unit</i>	<i>Note</i>
Case Operating Temperature	0	-	70	°C	Without air flow
Relative Humidity	0	-	85	%	
Power Supply Voltage	3.13	3.3	3.47	V	
Data Rate		25.78125		Gbps	Each channel
Transmission Distance			2	km	
Coupled fiber	Single mode fiber				9/125um SMF

Optical characteristics:

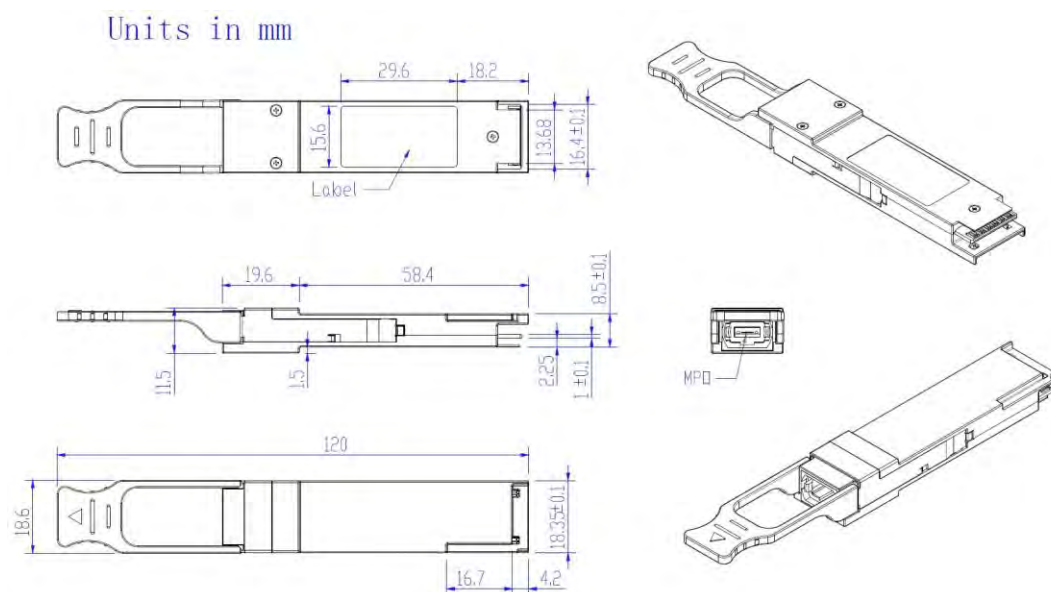
Transmitter

Parameter	Min	Typ	Max	Unit
Wavelength range	1260	1310	1355	nm
Total Output Power			9.5	dBm
Average Launch Power per Lane	-6		2	dBm
Optical Extinction Ratio	3.5			dB
Average launch Power OFF per Lane			-30	dBm

Receiver

Parameter	Min	Typ	Max	Unit
Receiver wavelength range	1260		1355	nm
Average receiver power, each Lane			3.5	dBm
Input Saturation Power (Overload)	4.5			dBm
Receiver Reflectance			-26	dB
LOS Assert	-18			dBm
LOS De-Assert			-12	dBm

Dimension:



Ordering code:

Code	Description
S100G-QP28-PSM4-02-D-XX	100 Gbps (4x 25 Gbps), SM, QSFP28 PSM4, up to 2 km, 0°C to +70°C, MPO connector