

PRE-QSFP28-Dxx-ZR1

QSFP28, PAM4 ZR, DWDM 100GHz, DWDM C-Band, 100G, 80km, SMF/LC, C-Temp

Product Features:

- Single Wave PAM4 Modulation
- DWDM ITU Channels 15-61 Available
- SMF Transmission Medium
- LC/UPC Connector
- Digital Diagnostics Monitoring (DDM)
- C-Temp Rated
- 100Gbps Maximum Data Rate
- <5.5W Power Consumption
- 80km Reach with EDFA/DCM



Product Applications:

- 100GBASE Ethernet
- Backhaul Networks
- Transport Networks

Standards:

- SFF-8636
- TAA Compliant
- RoHS

General Specifications:

Parameter	Min	Typical	Max	Unit
Case Operating Temperature	0	-	70	°C
Power Consumption	-	-	5.5	W
Power Supply Voltage	3.13	3.3	3.46	V
Storage Humidity	5	-	95	%
Storage Temperature	-40	-	85	°C
Transmission Distance	-	-	80 ¹	km
Data Rate (Total)	-	-	103.125	Gbps
Data Rate (Per Lane)	-	25.78125	-	Gbps

1. Requires amplification and dispersion compensation.

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Optical Characteristics: Transmitter

Parameter	Min	Typ	Max	Unit
Signaling Rate	-	53.25	-	Gbaud
Frequency Range	191.5	100GHz Grid	196.1	THz
Wavelength Tolerance	$\lambda_c - 12.5$	λ_c	$\lambda_c + 12.5$	GHz
Transmit Power (Avg) ²	-7	-	4	dBm
Transmit Power (OMA)	-4.8	-	4.2	dBm
Spectral Width (-20dB)	-	-	0.3	nm
Extinction Ratio	3.5	-	-	dB
Side-Mode Suppression Ration	30	-	-	dB
Dispersion Tolerance	-40	-	20	ps/nm
Optical Return Loss Tolerance	-	-	17.1	dB
Transmitter OFF Power per Lane	-	-	-30	dBm

2. Tx Power (Avg) is informative and not a principal indicator of signal strength

Optical Characteristics: Receiver

Parameter	Min	Typ	Max	Unit
Receive Wavelength	1528	-	1566	nm
Receive Power (Avg) ³	-3	-	3.5	dBm
Receive Power (OMA)	-	-	4.7	dBm
Receiver Sensitivity (OMA) ⁴	-	-	Max (-4.5, SECQ-5.9)	dBm
Receiver Reflectance	-	-	-26	dB
Rx Damage Threshold	5.5	-	-	dBm

3. Rx power at OSNR of 33.5 dB for pre-FEC BER < 2.4E-4.

4. Sensitivity at pre-FEC BER < 2.4E-4 with PRBS 2³¹-1.

Product Ordering Information

Part Number	Description
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