

PRE-CFP4(M)-ER4L

CFP4, ER4L, LWDM, 100/112G, 30/40km, SMF/LC



Product Features:

- EML Laser Transmitters
- APD Receivers
- LWDM Wavelengths
- SMF Transmission Medium
- LC-UPC Connector Type
- Digital Diagnostics Monitoring (DDM)
- C-Temp Rated
- 112Gbps Maximum Data Rate
- <6W Power Consumption



Product Applications:

- Transport Network
- Backhaul Networks
- 100GBASE-ER4 Ethernet
- OTN/OTU4

Standards:

- CFP MIS MSA
- CFP4 HW MSA
- IEEE 802.3ba
- ITU-T OTL4.4

General Specifications

Parameter	Min	Typ	Max	Unit
Case Operating Temperature	0	-	70	°C
Power Consumption	-	-	6	W
Power Supply Current	-	-	1820	mA
Power Supply Voltage	3.14	3.3	3.47	V
Storage Humidity	0	-	85	%
Storage Temperature	-40	-	85	°C
Transmission Distance	-	30	40 ¹	km
Data Rate (Total)	103.125	-	111.81	Gbps
Data Rate (Per Lane)	25.78	-	27.95	Gbps

Note 1: Requires RS-FEC

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Optical Characteristics: Transmitter

Parameter	Min	Typ	Max	Unit
Center Wavelength 1	1294.53	1295.56	1296.59	nm
Center Wavelength 2	1299.02	1300.05	1301.09	nm
Center Wavelength 3	1303.54	1304.58	1305.63	nm
Center Wavelength 4	1308.09	1309.14	1310.19	nm
Total Launch Power (Avg, 100G)	-	-	12.5	dBm
Total Launch Power (Avg, OTU4)	-	-	11.6	dBm
Transmit Power per Lane (Avg, 100G)	-2.5	-	6.5	dBm
Transmit Power per Lane (Avg, OTU4)	-0.2	-	5.1	dBm
Transmit Power per Lane (OMA)	0.5	-	6.5	dBm
Side Mode Suppression Ratio	30	-	-	dB
Dispersion Penalty per lane	-0.5	-	3	dB
Extinction Ratio	4.5	-	-	dB
Relative Intensity Noise	-	-	-130	dB/Hz
Transmitter OFF Output Power per lane	-	-	-30	dBm

Optical Characteristics: Receiver

Parameter	Min	Typ	Max	Unit
Receiver Wavelength 1	1294.53	1295.56	1296.59	nm
Receiver Wavelength 2	1299.02	1300.05	1301.09	nm
Receiver Wavelength 3	1303.54	1304.58	1305.63	nm
Receiver Wavelength 4	1308.09	1309.14	1310.19	nm
Receiver Power per Lane (Avg, 100GE)	-20.5	-	-3.5	dBm
Receiver Power per Lane (OMA, 100GE) ¹	-	-	-3.5	dBm
Receiver Power per Lane (Avg, OTU4)	-17.4	-	-4.9	
Sensitivity per Lane (OMA, 100GE)	-	-	-18.5	dBm
Sensitivity per Lane (OMA, OTU4)	-	-	-18.5	dBm
Stressed Receiver Sensitivity (OMA)	-	-	-16	dBm
Damage Threshold per Lane	-2.5	-	-	dBm

Note 1: Measured at BER 5E-5.

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Product Ordering Information

Part Number	Description
PRE-CFP4-ER4L	CFP4, ER4, LWDM, 100G, 30/40km, SMF/LC, C-Temp, DDM
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