

PRE-QSFP-SWDM4

QSFP, SWDM4, 850nm, 40G, 350m, MMF/LC



Product Features:

- Quad 10Gbps VCSEL Transmitters
- Duplex MMF Transmission Medium
- LC Connector
- Digital Diagnostics Monitoring (DDM)
- 0 – 70°C
- 40Gbps Maximum Data Rate
- <3.5W Power Consumption
- Link Length of 240m (OM3) and 350m (OM4)



Product Applications:

- Data Center
- Enterprise Networks
- 40GBASE Ethernet

Standards:

- IEEE 802.3ba
- RoHS

Description:

The PRE-QSFP-SWDM4 is a 40G transceiver designed to operate over industry standard Multi-Mode (OM3,4,) fiber using duplex LC connectors. The device operates using four Tx lasers at 850, 880, 910, and 940nm wavelengths. The PRE-QSFP-SWDM4 is ideally suited for upgrading 850nm networks from 10Gbps to 40Gbps while maintaining LC based MM connectivity.

General Specifications

Parameter	Min	Typical	Max	Unit
Case Operating Temperature	0	-	70	°C
Operating Humidity	15	-	85	%
Power Consumption	-	-	3.5	W
Power Supply Current	-	-	900	mA
Power Supply Voltage	3.14	3.3	3.46	V
Storage Temperature	-40	-	85	°C
Transmission Distance	240 ¹	-	350 ²	m
Data Rate (Total)	-	-	41.25	Gbps

Note 1,2: OM3, OM4

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Optical Characteristics: Transmitter

Parameter	Min	Typical	Max	Unit
Center Wavelength 1	-	850	-	nm
Center Wavelength 2	-	880	-	nm
Center Wavelength 3	-	910	-	nm
Center Wavelength 4	-	940	-	nm
Tx Power per Lane (Avg)	-7.5	-	3.0	dBm
Tx Power per Lane (OMA)	-5.5	-	3.0	dBm
RMS Spectral Width	-	-	.59	nm
Tx and Dispersion Eye Closure	-	-	5.0	dB
Extinction Ratio	2.0	-	-	dB
Optical Return Loss Tolerance	12	-	-	dB
Transmitter OFF Output Power per lane	-	-	-30	dBm

Optical Characteristics: Receiver

Parameter	Min	Typical	Max	Unit
Receiver Wavelength 1	-	850	-	nm
Receiver Wavelength 2	-	880	-	nm
Receiver Wavelength 3	-	910	-	nm
Receiver Wavelength 4	-	940	-	nm
Receiver Power per Lane (Avg)	-9.0	-	2.4	dBm
Receiver Power per Lane (OMA) ¹	-9.1	-	3.0	dBm
Damage Threshold per Lane	3.8	-	-	dBm
LOS De-Assert	-	-	-13	dBm
LOS Assert	-30	-	-	dBm
LOS Hysteresis	0.5	-	-	dB

Note 1: Value varies per channel; Value shown is worse-case channel.

Product Ordering Information

Part Number	Description
PRE-QSFP-SWDM4	QSFP, SWDM4, 850nm, 40G, 350m, MMF/LC, C-Temp