

SO-CFP-SR10

CFP, 100GBASE-SR10, MM, DDM, 1.9dB, 100m, MPO

OVERVIEW

The SO-CFP-SR10 is a CFP (C Form-factor Pluggable) transceiver for 100 Gbps Ethernet (100GBASE-SR10) applications. It is intended for use in inter- and intra-connect applications within data centers between switches, routers, storage equipment etc. The optical performance is in accordance with the 100GBASE-SR standard, i.e. for optical distances up to 150m over a MultiMode (MM) OM4-grade ribbon fiber.

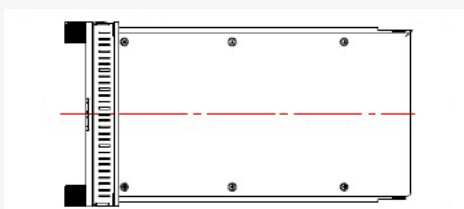
SO-CFP-SR10 uses 10x channels @ 10.3125 Gbps to transport an 100G Ethernet. These lanes can also be used to transport 10x 10GbE services via a break-out cable. The transceiver has a single 24/20 lane optical fiber MPO-connector.

TECHNICAL DATA

| | |
|----------------------------|--|
| Technology | Grey CFP |
| Transmission media | MM (1x MPO) |
| Typical reach | 100 m @ OM3 150 m @ OM4 |
| Nominal wavelength | 850 nm |
| Interface standards | 100GBASE-SR10 |
| Bit rate range | 103.125 Gbps ¹⁾ 10.3125 Gbps ²⁾ |
| Protocols Eth: | 100GbE 10x 10GbE |
| Power budget | 0 - 1.9 dB |
| Temperature range | 0°C to +70°C |
| Power consumption | < 8W |

| | | |
|-------------------------|------------------------|---|
| Transmitter data | Output power, per lane | Min: -7.6 dBm ⁴⁾ Max: +2.4dBm ⁴⁾ |
| | Wavelength range: | 840 – 860 nm ⁴⁾ |
| Receiver data | Minimum input power: | -9.5 dBm ⁴⁾ |
| | Overload (max power): | +2.4 dBm ⁴⁾ |
| | Wavelength range: | 840 – 860 nm ⁴⁾ |
| DDM | | Yes |
| MSA compliance | | CFP MSA |

- ¹⁾ Aggregated line rate (100GbE)
- ²⁾ Per channel line rate (10GbE)
- ³⁾ Total power (all lanes)
- ⁴⁾ Per lane @ 10.3125 Gbps



Regulatory compliance

| | |
|------------------|---|
| EMC CE | EN 55022:2010 EN 55024:2010 |
| UL/Safety | UL 60950-1 |
| FCC | 47 CFR PART 15 OCT, 2013 |
| RoHS | RoHS 6 |
| TUV | EN 60950-1:2006+A11+A1+A12+A2 EN 60825-1:2014 EN 60825-2:2004+A1+A2 |

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|----------------------|----------------|
| Storage temp. | -40°C to +85°C |
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Note! See "Definitions" below.

ORDERING INFORMATION

| Part number | Description |
|-------------|---|
| SO-CFP-SR10 | CFP, 100GBASE-SR10, MM, DDM, 1.9dB, 100m, MPO |

DEFINITIONS

| | |
|-------------------------------|---|
| Technology: | Grey; Transceiver type for non-WDM applications. Electrical or optical. CWDM; Transceiver type for CWDM applications using G.694.2 channel grid. DWDM; Transceiver type for DWDM applications using G.694.1 channel grid. BiDi; Transceiver pair using two different wavelength channels operating on a single-fiber. DAC: Direct Attach Cable (DAC). Electrical or optical cable with attached connectors. |
| Transmission Media: | Type of fiber, e.g. Multimode (MM) or Singlemode (SM). Number of and connector type within brackets (e.g. 2x LC, 1x MPO). |
| Typical reach: | Nominal distance performance based on dispersion and power budget properties, i.e. w/o dispersion compensation and optical amplification. |
| Bit rate range: | Supported bit rate range in Gigabit or Megabit per second (Gbps or Mbps). |
| Protocols: | Protocols within supported bit rate range. |
| Nominal wavelength: | Typical wavelength from transmitter. |
| Interface standards: | Referenced interface standards e.g. IEEE 802.3 standard for 10GbE services. |
| Power budget: | Min and max power budget between Transmitter and Receiver. Excluding any dispersion penalty. |
| Dispersion tolerance/penalty: | Maximum amount of tolerated dispersion and required reduction of power budget to maintain BER better than $1E^{-12}$. Defined at a specific bit rate. |
| Temperature range: | Max operating case temperature range. Standard temperature range: typically 0°C to +70°C (32°F to +158°F) Extended temperature range (E-temp): typically -20°C to +75°C (-4°F to +167°F) Industrial temperature range (I-temp): -40°C to +85°C (-40°F to +185°F) |
| Power consumption: | Worst case power consumption. |
| Transmitter Output power: | Average output power. Provided in min and max values. |
| Receiver minimum input power: | Minimum average input power at specified BER, normally $1E^{-12}$. |
| Receiver max input power: | Maximum average input power giving a BER, normally $1E^{-12}$. |
| DDM: | Digital Diagnostic Monitoring functionality as defined in SFF-8472 MSA. |

OPTICAL INTERFACE

