SO-SFP-8GFC-SD

SFP+, 8/4/2/1 Gbps FC/FICON, 850nm, MM, DDM, 5.1dB, 300m@OM3

OVERVIEW

The SO-SFP-8GFC-SD is a versatile 850nm transceiver for MultiMode (MM) fiber focused, but not limited to SAN services. The optical performance provides a bridgeable distance of up to 300m depending on fiber class.

The transceiver has no minimum distance (i.e. no minimum attenuation) which is ideal for intra-office connections since extra attenuators need not be considered. An OM3 or higher-grade fiber shall be used to avoid distance issues.

This transceiver provides digital diagnostic functions via a 2-wire serial interface as defined by the SFF-8472 specification.

TECHNICAL DATA

Technology		Grey SFP+
Transmission media		MM (2x LC)
Typical reach		300 m @ OM3 fiber
Nominal wavelength		850 nm
Interface standards		1000BASE-LX 400-M5E-SN-I 800-M5E-SN-I
Bit rate range		0.614 - 8.5 Gbps
Protocols	Eth:	GbE
	SDH/SONET:	STM-16/OC-48 STM-4/OC-12
	FC:	8G FC 4G FC 1G FC
	CPRI:	Opt 1 (0.6144 Gbps) Opt 2 (1.2288 Gbps) Opt 3 (2.4576 Gbps) Opt 4 (3.0720 Gbps) Opt 5 (4.9152 Gbps) Opt 6 (6.1440 Gbps) Opt 7A (8.11008 Gbps)
	OBSAI:	1x (0.768 Gbps) 2x (1.536 Gbps) 4x (3.0720 Gbps) 8x (6.1440 Gbps)
Power budget		0 - 5.1 dB
Temperature range		0°C to +70°C
Power consumption		< 1.0W

Transmitter data	Output power:	Min: -6.0 dBm Max: -1.0 dBm
	Tx wavelength:	Min: 840 nm Max: 860 nm
Receiver data	Minimum input power:	-11.1 dBm [1)]
	Overload (max power):	0.0 dBm
	Wavelength range:	840 - 860 nm
DDM		Yes
MSA compliance		SFF-8431 SFF-8472

[1)] @ 8.5Gbps

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

Storage temp.	-40°C to +85°C

Note! See “Definitions” below.

ORDERING INFORMATION

Part number	Description
SO-SFP-8GFC-SD	SFP+, 8/4/2/1 Gbps FC/FICON, 850nm, MM, DDM, 5.1dB, 300m@OM3

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. 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 at specified BER, normally $1E^{-12}$.
DDM:	Digital Diagnostic Monitoring functionality as defined in SFF-8472 MSA.