

SO-SFP28-32GFC-SD

SFP28, 32G FC, 25GbE, 850nm, MM, DDM, 7dB, 100m

OVERVIEW

The SO-SFP28-32GFC-SD is an 850nm SFP28 transceiver for MultiMode (MM) fiber, supporting both 32G Fiber Channel (FC) as well as 25G Ethernet services. The optical performance provides a bridgeable distance of up to 100 m for 32G FC when using an OM4 grade MM fiber.

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.

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

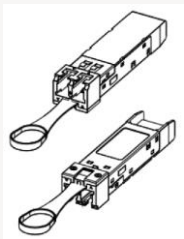
As stipulated by the 32G FC and 25G Ethernet standards, Forward Error Correction (FEC) is required to be implemented by the host in order to ensure reliable system operation. The optical parameters below will provide a bit error ratio (BER) of 1×10^{-6} for 32G FC and 5×10^{-5} for 25GbE. FEC will provide the required quality for secure service.

TECHNICAL DATA

Technology	Grey SFP28
Transmission media	MM (2x LC)
Typical reach	100m @ OM4 70m @ OM3
Nominal wavelength	850 nm
Interface standards	3200-SN (FC-PI-6)
Bit rate range (Gbps)	28.05 (FC) 25.78 (Eth)
Protocols	FC: 32G FC Eth: 25GbE
Power budget	0 – 7.0 dB ¹⁾ 0 – 1.9 dB ²⁾
Temperature range	0°C to +70°C
Power consumption	< 1.0W

¹⁾ 28.05 Gbps (32G FC) @ BER 1E-6

²⁾ 25.78 Gbps (25GbE) @ BER 5E-5



Note! See “Definitions” below.

Transmitter data	Output power:	Min: -6.2 dBm ¹⁾ Max: +2.0 dBm ¹⁾ Min: -8.4 dBm ²⁾ Max: +2.4 dBm ²⁾
	Tx wavelength:	Min: 840 nm Max: 860 nm
Receiver data	Minimum input power:	-13.2 dBm ¹⁾ -10.3 dBm ²⁾
	Overload (max power):	+2.4 dBm ^{1), 2)}
	Wavelength range:	840 - 860 nm
DDM		Yes
MSA compliance		SFF-8402 SFF-8472

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

ORDERING INFORMATION

Part number	Description
SO-SFP28-32GFC-SD	SFP28, 32G FC, 25GbE, 850nm, MM, DDM, 7dB, 100m

Subject to change without notice.

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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.