

SO-SFP-4GFC  
4G/2G/1G Fibre Channel SFP Family

INTRODUCTION

The SO-SFP-4GFC transceiver family are small form factor pluggable modules for bi-directional serial optical data communications such as 4x/2x/1x Fibre Channel and 1000BASE Ethernet. The modules are hot pluggable and digital diagnostic functions are available via an I<sup>2</sup>C serial bus specified in the SFP MSA SFF-8472.

The modules meet the requirements of the IEEE 802.3 Gigabit Ethernet standard and ANSI Fibre Channel specifications, and are suitable for interconnections in Gigabit Ethernet and Fibre Channel environments. The family covers a wide range of applications, with 850nm versions available for multimode fiber and 1310nm and CWDM wavelengths available for singlemode fiber.

CWDM modules operate at nominal Coarse Wavelength Division Multiplexing (CWDM) wavelengths. Eighteen center wavelengths are available from 1271 nm to 1611 nm with each step being 20 nm. The CWDM characteristics are fully compliant to the wavelength parameters specified in ITU standards G.694.2 and G.695.

APPLICATIONS

- 4.25 Gb/s, 2,125 Gb/s & 1.0625 Gb/s Fibre Channel
- 1000BASE Ethernet

FEATURES

- Up to 20 km transmission at 1310 nm
- Up to 100 km transmission at 1550 nm
- Up to 100 km transmission at CWDM wavelengths
- Hot-Pluggable SFP footprint LC Optical Transceiver
- Small Form-Factor Pluggable (SFP) MSA compatible
- 18 CWDM wavelengths (λ): 1271 nm to 1611 nm
- SFF-8472 Digital Diagnostic Function

LASER SAFETY

This singlemode transceiver is a Class 1 laser product. It complies with IEC-60825 and FDA 21 CFR 1040.10 and 1040.11. The transceiver must be operated within the specified temperature and voltage limits. The optical ports of the module need to be terminated with an optical connector or a dust plug.



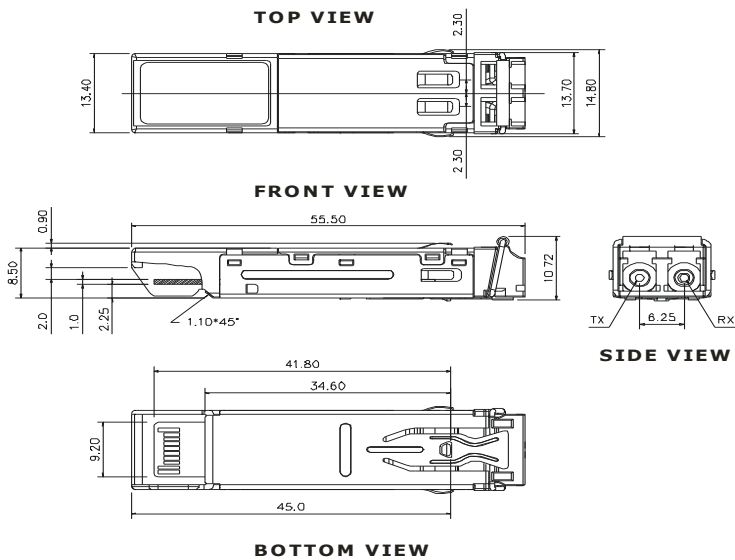
Ordering Information:

Part no:	Description/Application
SO-SFP-4GFC-SD	SFP, 4/2/1 Gbps FC/FICON, MM, DDM, 850nm, 7dB, 150m
SO-SFP-4GFC-L5D	SFP, 4/2/1 Gbps FC/FICON, 1310nm, SM, DDM, 10dB, 5km
SO-SFP-4GFC-L10D	SFP, 4/2/1 Gbps FC/FICON, 1310nm, SM, DDM, 10dB, 10km
SO-SFP-4GFC-L20D	SFP, 4/2/1 Gbps FC/FICON, 1310nm, SM, DDM, 13dB, 20km
SO-SFP-4GFC-L30D	SFP, 4/2/1 Gbps FC/FICON, 1310nm, SM, DDM, 18dB, 30km
SO-SFP-4GFC-L50D	SFP, 4/2/1 Gbps FC/FICON, 1550nm, SM, DDM, 18dB, 50km
SO-SFP-4GFC-L100D	SFP, 4/2/1 Gbps FC/FICON, 1550nm, SM, DDM, 28dB, 100km

Ordering Information: CWDM SFPs

Part no:	Description/Application
SO-SFP-4GFC-50D-Cxx	SFP, 4/2/1 Gbps FC/FICON, CWDM, SM, DDM, 18dB, 50km
SO-SFP-4GFC-80D-Cxx	SFP, 4/2/1 Gbps FC/FICON, CWDM, SM, DDM, 28dB, 80km
SO-SFP-4GFC-100D-Cxx	SFP, 4/2/1 Gbps FC/FICON, CWDM, SM, DDM, 30dB, 100km

Mechanical Specification:



Optical Parameters:

Part no.\Parameter	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SO-SFP-4GFC-SD	850 nm	-9 to -2.5	-15 to -2.5	6
SO-SFP-4GFC-L5D	1310 nm	-8 to -3	-18 to 0	10
SO-SFP-4GFC-L10D	1310 nm	-8 to -3	-18 to 0	10
SO-SFP-4GFC-L20D	1310 nm	-5 to 0	-18 to 0	13
SO-SFP-4GFC-L30D	1310 nm	0 to +4	-18 to 0	18
SO-SFP-4GFC-L50D	1550 nm	0 to +4	-18 to 0	18
SO-SFP-4GFC-L100D	1550 nm	1 to +5	-27 to -9	28

Optical Parameters: CWDM SFPs

Part no.\Parameter	Wavelength [nm]	Opt. Output Power [dBm]	Opt. Receiver Sensitivity [dBm]	Power Budget [dB]
SO-SFP-4GFC-50D-Cxx**	CWDM	0 to +4	-18 to 0	18
SO-SFP-4GFC-80D-Cxx**	CWDM	+1 to +5	-27 to -9	28
SO-SFP-4GFC-100D-Cxx**	CWDM	+3 to +6	-27 to -9	30

- C27 = CWDM 1270 nm  
-C35 = CWDM 1350 nm  
-C43 = CWDM 1430 nm  
-C51 = CWDM 1510 nm  
-C59 = CWDM 1590 nm
- C29 = CWDM 1290 nm  
-C37 = CWDM 1370 nm  
-C45 = CWDM 1450 nm  
-C53 = CWDM 1530 nm  
-C61 = CWDM 1610 nm
- C31 = CWDM 1310 nm  
-C39 = CWDM 1390 nm  
-C47 = CWDM 1470 nm  
-C55 = CWDM 1550 nm
- C33 = CWDM 1330 nm  
-C41 = CWDM 1410 nm  
-C49 = CWDM 1490 nm  
-C57 = CWDM 1570 nm

Specification subject to change without notice.