21700139	**DATA SHEET**
Valid from: 05.06.2025	**MUN-SFP-1G-MM-LC-85-0.5-DDI-LLP**

Description

- Multie-Mode 850nm
- Operating Data Rate up to 1.25Gbps
- Duplex SFP Transceiver
- 550m with 50/125 µm multi mode fiber
- 300m with 62.5/125 µm multi mode fiber
- Hot pluggable SFP footprint duplex LC connector interface
- Class 1 FDA and IEC60825-1 Laser Safety Compliant
- Operating Temperature: -40°C - 85°C
- Compliant with MSA SFP Specification
- Digital Diagnostic compliant with SFF-8472
- Safety Certification: TUV/UL/FDA

Picture just for Illustration

General characteristics

The MUN-SFP-1G-MM-LC-85-0.5-DDI-LLP multi-mode transceiver is a small form factor pluggable module for bi-directional serial optical data communications such as Gigabit Ethernet 1000BASE-SX and Fiber Channel FC-PH-2 for 100-M5-SN-1 and 100-M6-SN-1. It is with the SFP 20-pin connector to allow hot plug capability. This module is designed for multi-mode fiber and operates at a nominal wavelength of 850nm.
The transmitter section uses a Vertical Cavity Surface Emitted Laser (VCSEL) which is a Class 1 laser compliant according to International Safety Standard IEC 60825.
The MUN-SFP-1G-MM-LC-85-0.5-DDI-LLP is designed to be compliant with SFF-8472 SFP Multi-source Agreement (MSA).

Variation

Article	**Description**
21700139	MUN-SFP-1G-MM-LC-85-0.5-DDI-LLP

Electrical properties

Absolute maximum ratings

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	Ts	-40	+85	°C
Supply Voltage	Vcc	-0,5	3.6	V
Operating Relative Humidity		-	95	%

Recommended Operating conditions

Parameter	Symbol	Min.	Typical	Max.	Unit
Operating temperature	Tc	-40		+85	°C
Power supply voltage	Vcc	3.15	3.3	3.45	V
Power supply current	Icc			300	mA
Data rate	GBE		1.25		Gbps
	FC		1.063		

Optical and electrical characteristics

Parameter	Symbol	Min.	Typical	Max.	Unit
Length of 50µm Core Diameter MMF	L		550		m
Data rate			1.063/1.25		Gbps
Transmitter					
Centre wavelength	λc	830	850	860	nm
Average output power *(1)	Pout	-9.5		-3	dBm
Output optical eye *(2)	IEEE802.3z and ANSI Fiber Channel Compliant*(3)				
Receiver					
Center wavelength	λc	760		860	nm
Receiver sensitivity *(4)	Pmin			-17	dBm
Receiver overload	Pmax	-3			dBm

Notes:

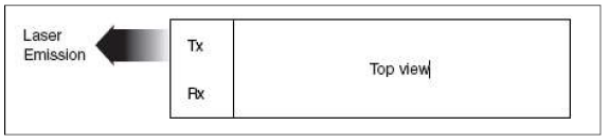
*(1) Output is coupled into a 62.5/125 µm multi-mode fiber

*(2) Filtered, measured with a PRBS 2^7-1 test pattern @1.25Gbps

*(3) Eye pattern mask

*(4) Minimum average optical power at BER less than 1E-12, with a 2^7-1 NRZ PRBS and ER=9 dB.

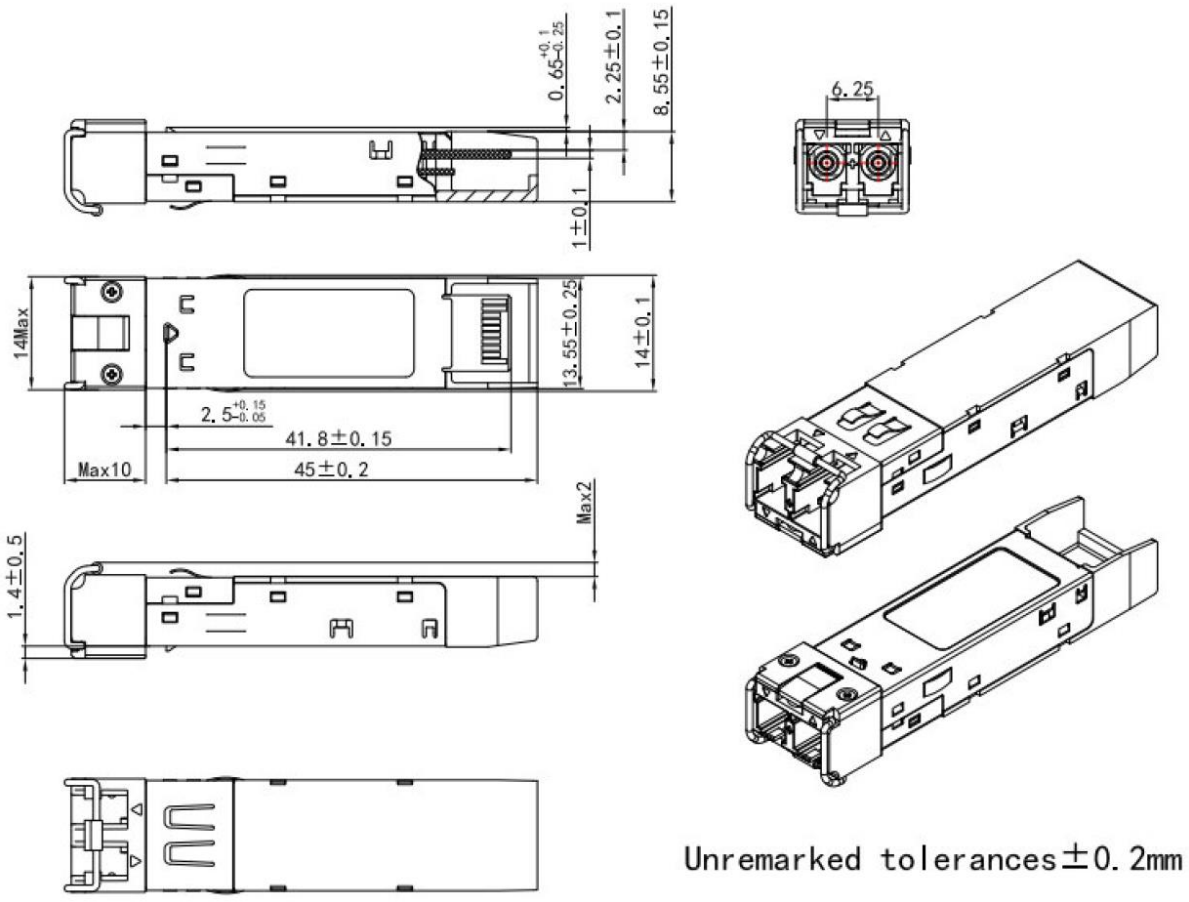
Laser emission



Standards / Approvals

Multiple source agreement	MSA SFP specification
FDA laser class	Class 1
Diagnostic monitoring	SFF-8472
Laser safety compliance	IEC60825-1
Safety certification	TUV/UL/FDA

Technical drawing



Application range

Gigabit Ethernet Switches and Routers, Fiber Channel Switch Infrastructure, other optical links,

Automation, industrial machinery and plant engineering

Note

Photographs are not true to scale and do not represent detailed images of the respective products.

Commodity product, not a Lapp product.