

Mini-GBIC (SFP)

125Mbps, 850nm, 100Base SFP Transceiver

- Distance: 2km
- Standard Operating Temperature: -10°C ~ 70°C
- Wide Operating Temperature: -40°C ~ 85°C



OVERVIEW

Lantech 100Base Small Form Factor Pluggable (SFP) transceiver module series is specifically designed for the high performance integrated duplex data link over single-mode or multi-mode optical fiber. These transceiver modules are compliant with the SFP Multisource Agreement (MSA). With the hot pluggability, these modules offer an easy way to be

installed into SFP MSA compliant ports at any time without the interruption of the host equipments operating online.

The high performance 850nm provides superior performance for Ethernet applications up to 2KM MMF optical links.

FEATURES & BENEFITS

- Compliant with IEEE802.3u 100Base-FX Standard
- Compliant with SFP MSA
- Hot Pluggable
- 850nm VCSEL laser transmitter
- Duplex LC connector
- 2-wire interface for management
- Single +3.3V power supply voltage
- Transmission distance of 2KM over MM fiber
- RoHS Compliant

SPECIFICATION

Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Unit	Note
Storage Temperature	Ts	-40	+85	°C	
Supply Voltage	VccT, VccR	-0.5	4.0	V	
Storage Relative Humidity	RH	5	95	%	

Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Case Operating Temperature	Tc	-10		70	°C	
Supply Voltage	Vcc	3.15	3.3	3.45	V	
Supply Current	Icc			240	mA	

Receiver Electro-Optical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Differential Data Output Voltage	Vout, pp	500		1200	mV	
Maximum Input Power	P _{IN} MAX	-3			dBm	1
Receiver Sensitivity	P _{IN} MIN			-26	dBm	1
Operating Center Wavelength	λc	770		870	nm	
LOS De-Assert	LOS _D			-26	dBm	
LOS Assert	LOS _A	-37			dBm	
LOS Hysteresis	LOS _{VHY}	0.5			dB	
Optical Rise / Fall Timet	t _r / t _f			2	ns	2
Receiver LOS Signal Output Voltage-Low	LOS _{VL}	GND		GND+0.5	V	
Receiver LOS Signal Output	LOS _{VH}	2.4		Vcc	V	

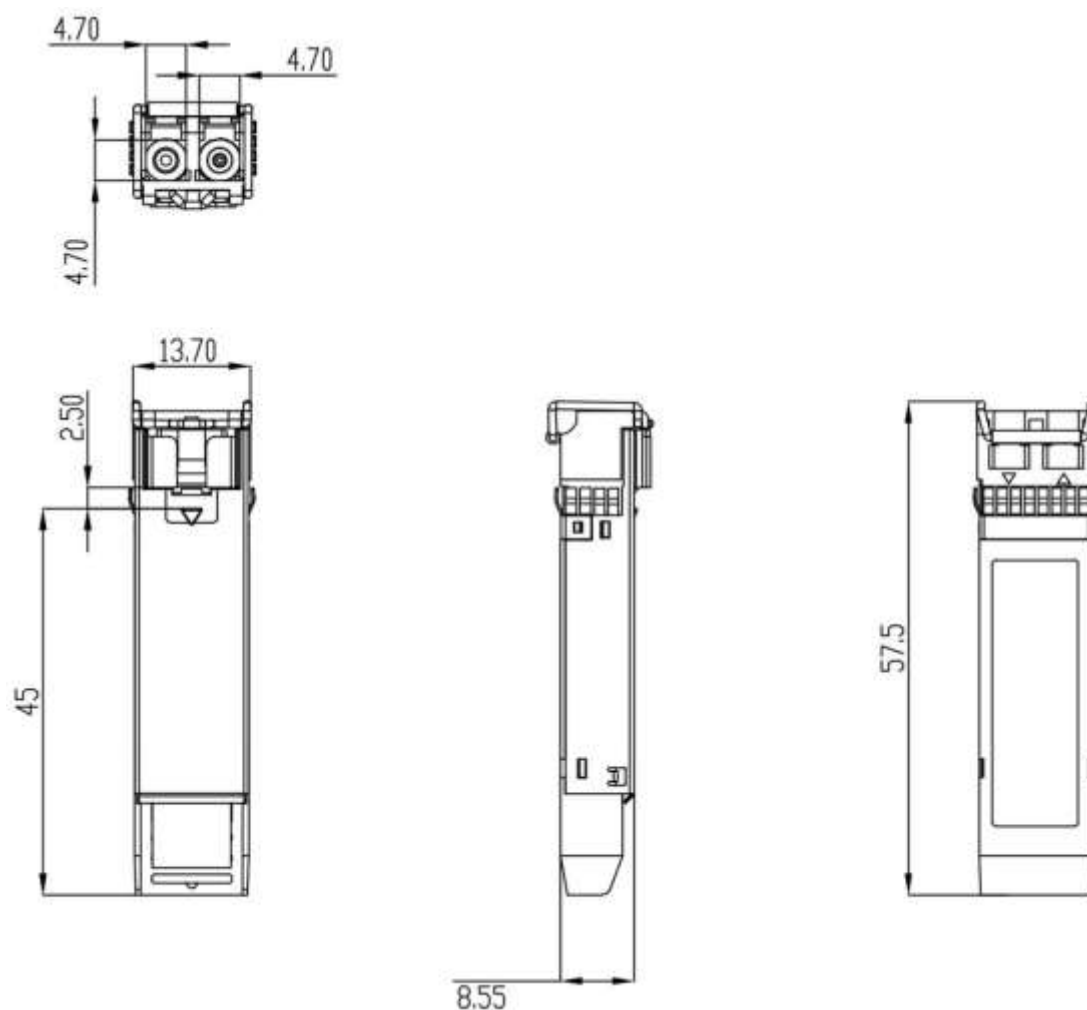
Voltage-High

Notes: 1. With BER better than or equal to 1×10^{-12} , measured in the center of the eye opening with $2^7 - 1$ PRBS 2. 20% to 80% value

Transmitter Electro-Optical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Differential Data Input Voltage	V_{DIFF}	400		2000	mV	
Optical Launch Power	P_o	-9		-3	dBm	1
Optical Extinction Ratio	E_R	9			dB	
Center Wavelength	λ_c	830	850	870	nm	
Spectral Width	$\Delta\lambda$			0.85	nm	
Optical Rise / Fall Timet	t_r / t_f			2	ns	2
Optical Eye Mask		IEEE802.3u				
Transmit Disable Voltage	V_{DIS}	2.0		V_{CC}	V	
Transmit Enable Voltage	V_{EN}	GND		GDN+0.8	V	

Notes: 1. Coupling into a 62.5/125 μ m, NA=0.275 fiber. 2. 20% to 80% value

DIMENSIONS (unit=mm)*All dimensions are ± 0.2 mm unless otherwise specified**ORDERING INFORMATION**

Part Number	Wavelength	Mode	Link	Temp.
8330-073D-V1	850nm	Multi-mode	2km	-10~70°C
8330-073DE-V1	850nm	Multi-mode	2km	-40~85°C

Lantech Communications Global Inc.

www.lantechcom.tw
info@lantechcom.tw

© 2022 Copyright Lantech Communications Global Inc. all rights reserved.
The revise authority rights of product specifications belong to Lantech Communications Global Inc.
Lantech may make changes to specification and product descriptions at anytime, without notice.