

SFP-1G85M-SX Release Note:

Multi-mode 850 nm, 0.5 km SFP module

Optical Specifications:

Transmitter Electro-Optical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Transmitter Differential Input Voltage	TD +/-	400		2400	mV	
Tx_Fault - High	V _{Fault_H}	2		V _{cc}	V	
Tx_Fault - Low	V _{Fault_L}	V _{ee}		V _{ee} +0.8	V	
Tx_Disable - High	V _{Disable_H}	2		V _{cc}	V	
Tx_Disable - Low	V _{Disable_L}	V _{ee}		V _{ee} +0.8	V	
Optical Output Power	P _o	-9.5		-4	dBm	1
Optical Extinction Ratio	E _R	9			dB	
Center Wavelength	λ _c	830	850	860	nm	
Spectral Width (RMS)	Δλ			0.85	nm	
Optical Rise / Fall Time	t _r / t _f			260	ps	2
Relative Intensity Noise	RIN			-117	dB/Hz	
Total Contributed Jitter	TJ			227	ps	
Coupled Power Ratio	CPR	9			dB	

Notes:

1. Coupling into a 50/125μm multimode fiber.
2. 20% to 80% value

Receiver Electro-Optical Interface

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Receiver Differential Output Voltage	RD +/-	400		2000	mV	
Receiver Overload	P _{IN} MAX	-3				1
Receiver Sensitivity	P _{IN} MIN			-17	dBm	1
Receiver Output Rise / Fall Time	t _r / t _f			350	ps	2
Operating Center Wavelength	λ _c	770		860	nm	
Return Loss	RL	12			dB	
Receiver Loss of Signal - TTL Low	P _{RX_LOSD}			-17.5	dBm	
Receiver Loss of Signal - TTL High	P _{RX_LOSA}	-35			dBm	
Receiver Loss of Signal - Hysteresis	P _{RX_LOSH}	0.5			dB	

Notes:

1. With BER better than or equal to 1×10^{-12} , measured in the center of the eye opening with 2⁷-1 PRBS
2. 20% to 80% value

Operating Temperature: -40~+85°C