

Specification of Transmitter

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Average Output Power	POUT	-2		+3	dBm	Note (1)
Extinction Ratio	ER	8.2			dB	
Center Wavelength	λ_C	1290	1310	1330	nm	DFB Laser
Side Mode Suppression Ratio	SMSR	30				
Spectrum Bandwidth(-20dB)	σ			1	nm	
Transmitter OFF Output Power	POff			-45	dBm	
Differential Line Input Impedance	RIN	90	100	110	Ohm	
Output Eye Mask	Compliant with G.959(class 1 laser safety)					Note (2)

Note (1): Measure at 2²³-1 NRZ PRBS pattern

Note (2): Transmitter eye mask definition

Specification of Receiver

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Input Optical Wavelength	λ_{IN}	1270		1610	nm	PIN-TIA
Receiver Sensitivity	PIN			-19	dBm	Note (1)
Input Saturation Power (Overload)	PSAT	-3			dBm	
Los Of Signal Assert	PA			-20	dBm	
Los Of Signal De-assert	PD	-35			dBm	Note (2)
LOS Hysteresis	PA-PD	0.5	2	6	dB	

Note (1): Measured with Light source 1310nm, ER=8.2dB; BER = 10^{-12} @PRBS=2²³-1 NRZ

Note (2): When LOS de-asserted, the RX data+/- output is High-level (fixed)

Electrical Interface Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Transmitter						
Total Supply Current	ICC			A	mA	Note (1)
Transmitter Disable Input-High	VDISH	2		V _{cc} +0.3	V	
Transmitter Disable Input-Low	VDISL	0		0.8	V	
Transmitter Fault Input-High	VDISL	2		V _{cc} +0.3	V	
Transmitter Fault Input-Low	VTxFH	0		0.8	V	
Receiver						
Total Supply Current	ICC			B	mA	Note (1)
LOSS Output Voltage-High	VLOSH	2		V _{cc} +0.3	V	LVTTL
LOSS Output Voltage-Low	VLOSL	0		0.8	V	

Note (1): A (TX) + B (RX) = 280mA (Not include termination circuit)

Ordering Information

Part number	Description	TX Power (dBm)	RX Sens. (dBm)	Fiber Budget (dB)	Distance (km)	DDM
SV-SFP-2FCLX4D	Starview SFP module 2Gbps Fiber Channel data rate of 2.125Gbps with Digital Diagnostic Monitoring (DDM), Fiber Optic 1310nm SM (LC), distance up to 40km	-2 to 3	-19 to -3	17	40	YES

SV-SFP-2FCLX4DH	Starview SFP module 2Gbps Fiber Channel data rate of 2.125Gbps with Digital Diagnostic Monitoring (DDM), Fiber Optic 1310nm SM (LC), Industrial temperature range, distance up to 40km	-2 to 3	-19 to -3	17	40	YES
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