



125Mbps SFP Transceiver 850nm 100BASE-SX P/N ASX1P0x-0850 (550m)



Description

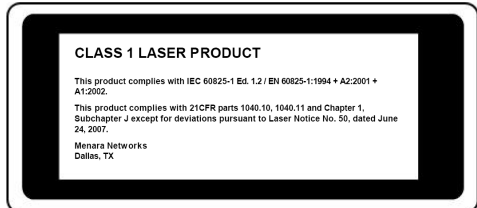
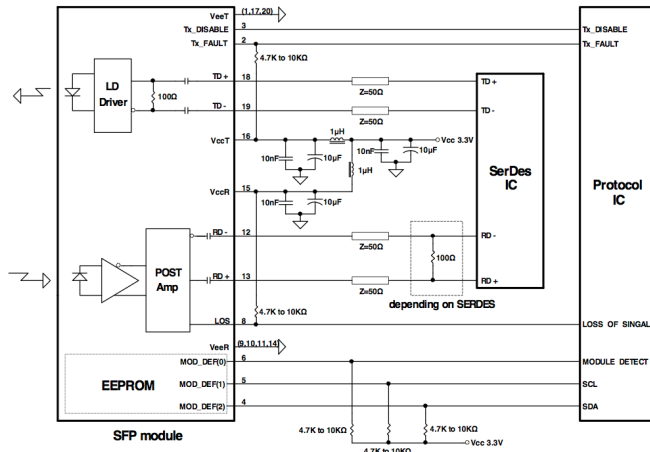
Menara Networks' ASX1P0x-0850 100Base-SX SFP is designed for use in single channel 100M Ethernet 850nm links up to 550m over multimode fiber. The SFP modules support IEEE 802.3 100BASE-SX applications for Ethernet Switches or IP Router optical interfaces. Digital Optical Monitoring interfaces are provided via the SFP SFF-8472 standards compliant I²C interface.

Applications

- 550m 100M Ethernet switch IP Router bandwidth expansion

Features

- Hot-pluggable SFP footprint
- Up to 125Mbps bit rates
- 850nm VCSEL transmitter
- Single 3.3V power supply
- Power dissipation < 1W
- 0°C to +70°C or -40°C to +85°C
- Duplex LC fiber connectors
- IEEE 802.3 100Base-SX compliant
- Full Digital Optical Monitoring
- Metal enclosure for lower EMI
- Complies with RoHS directive (2002/95/EC)
- Compliant with SFP MSA SFF-8472 and SFF-8074
- Laser Class 1 IEC/CDRH compliant
- Links of 550m over 50/125µm multimode fiber (MMF)



Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-		125		Mb/s	-
Center Wavelength	λ	830	850	860	nm	
Spectral Width (RMS)	$\Delta\lambda$	-	-	0.85	nm	
Average Optical Output Power	P _o	-9.5	-	-3.5	dBm	1
Extinction Ratio	E _r	9	-	-	dB	
Output Eye Diagram	Compliant with IEEE 802.3					
Optical Rise/Fall Time (20%~80%)	tr/ta			0.26	ns	
Data Input Swing Differential	V _{IN}	400		1800	mV	2
Input Differential Impedance	Z _{IN}	90	100	110	Ω	
TX Disable	Disable	2.0		V _{CC}	V	
	Enable	0		0.8	V	
TX Fault	Fault	2.0		V _{CC}	V	
	Normal	0		0.8	V	

1. The optical power is launched into MMF.
2. PECL input, internally AC-coupled and terminated

Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-		125		Mb/s	-
Operating Wavelength	λ	770	-	860	nm	3
Receiver sensitivity	S _{en}			-24	dBm	3
Saturation	P _{sat}	0			dBm	
LOS Assert	LOS _A	-35			dBm	
LOS Deassert	LOS _D			-26	dBm	
LOS Hysteresis		1		4	dB	
Data Output Swing Differential	V _{OUT}	400		1800	mV	4
LOS	High	2.0		V _{CC}	V	
	Low	0		0.8	V	

3. Measured with a PRBS 2⁷-1 test pattern @ 125Mbps, BER $\leq 1 \times 10^{-12}$
4. Internally AC-coupled

Ordering Information

Part Number	ROHS Compliant	Operating Case Temperature
ASX1P0x-0850	ROHS-6	0°C ~ +70°C
ASX1P2x-0850		-40°C ~ +85°C

x = J for Juniper
x = C for Cisco
x = A for Alcatel
x = O for Cisco ONS



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