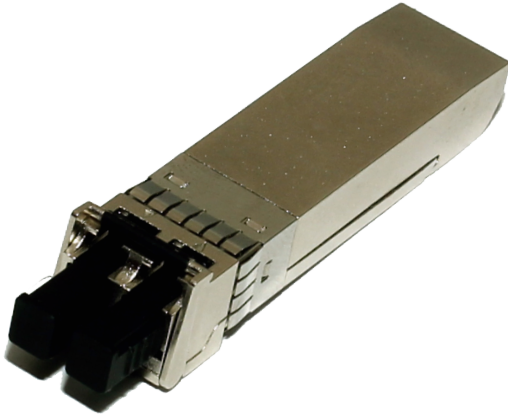




10GBASE-SR SFP+ Transceiver 10Gb/s 850nm P/N 5SR0P0x-0850



Description

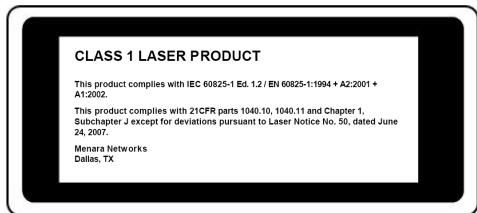
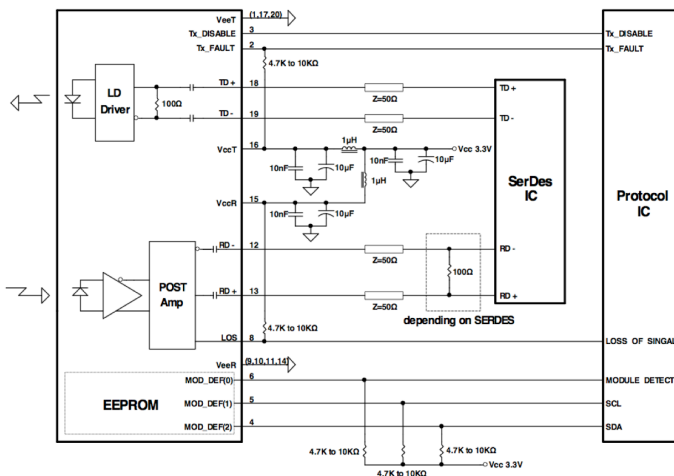
Menara Networks' 5SR0P0x-0850 transceivers are designed for use in 10Gb/s to 11.1Gb/s links up to 300m over Type A1a (50/125 μm multimode) fiber. The SFP+ module supports IEEE 802.3ae 10GBASE-SR and –SW applications along with 10G FC 1200-Mx-SN-I applications for Ethernet Switches or IP Router optical interfaces. Digital Optical Monitoring interfaces are provided via the SFP+ standards compliant I²C interface.

Applications

- 10GBASE-SW/SR 10G Ethernet
- 8GB/10GB Fibre Channel
- Ethernet Switch or IP Router Interconnect

Features

- Hot-pluggable SFP+ footprint
- Support 10Gb/s bit rates
- 850 VCSEL Laser transmitter
- InGaAs PIN photodiode receiver
- Single 3.3V power supply
- Power dissipation < 1W
- -5°C to +70°C and -40°C to +85°C Operating Temperature
- Duplex LC fiber connectors
- IEEE 802.3ae 10GBASE-SR/SW
- 10G FC 1200-Mx-SN-I
- Full Digital Optical Monitoring
- Metal enclosure for lower EMI
- Complies with RoHS directive (2002/95/EC)
- Compliant with SFP+ Electrical MSA SFF-8431
- Compliant with SFP+ Mechanical MSA SFF-8432
- Laser Class 1 IEC/CDRH compliant
- Links of 300m with multimode mode fiber (MMF) maximum interconnect distances



Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	8.5	10.3125	10.5	Gb/s	
Center Wavelength	λ	840	850	860	nm	
Spectral Width (RMS)	$\Delta\lambda$			0.45	nm	
Average Optical Output Power	P _o	-6.5	-	-1	dBm	1
Optical Modulation Amplitude @10.3125Gb/s and Fiber Channel	P _{OMA}	-4.3			dBm	
Optical Power of Off Transmitter	P _{off}			-30	dBm	
Extinction Ratio	E _r	3.5			dB	2
Transmitter Dispersion Penalty	TDP			3.9	dB	
Relative Intensity Noise	R _{IN}			-128	dB/Hz	
Optical Return Loss Tolerance	-			12	dB	
Differential Data Input Swing	V _{INPP}	400	-	1600	mV	
Tx Fault	V _{FAULT}	-0.3		0.4	V	
Output Eye Diagram	Compliant with IEEE 802.3ae					

1. Measured with a PRBS 2³¹-1 test pattern at 10.3125Gbps
2. Measured with a PRBS 2³¹-1 test pattern at 10.3125Gbps, BER ≤ 10⁻¹²

Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	8.5	10.3125	10.5	Gb/s	
Operate Wavelength	-	840	850	860	nm	
Receiver OMA sensitivity@10.3125Gb/s	S _{en1}			-11.1	dBm	3
Stressed OMA receiver sensitivity@10.3125Gb/s	S _{en2}			-7.5	dBm	3
Maximum Input Power	P _{max}			-1	dBm	3
Receiver reflectance	R _{RX}			-12	dB	
Receiver Optical Return Loss	-			-27	dB	
LOS Asserted	LOS _A	-30			dBm	
LOS De-Asserted	LOS _D			-12	dBm	
LOS Hysteresis				5.0	dB	
Differential Data Output Swing	V _{OUTPP}	300	-	850	mV	

3. Measured with a PRBS 2³¹-1 test pattern at 10.3125Gbps, BER ≤ 10⁻¹²

Ordering Information

Part Number	ROHS Compliant	Operating Case Temperature
5SR0P0x-0850 5SR0P2x-0850	ROHS-6	-5 ~ +70°C -40 ~ +85°C

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



menarainfo@menaranet.com

www.menaranet.com