

Features

- Up to 11.1Gbps Data Links
- Up to 300m transmission on MMF
- Power dissipation < 1W
- VSCEL laser and PIN receiver
- Metal enclosure, for lower EMI
- 2-wire interface with integrated Digital Diagnostic monitoring
- Hot-pluggable SFP+ footprint
- Specifications compliant with SFF 8472
- Compliant with SFP+ MSA with LC connector
- Single 3.3V power supply
- Commercial case operating temperature range: 0°C to +70°C



Applications

- 10GBASE-SR/SW & 10G Ethernet
- ### Standard
- Compliant to SFF-8431
 - Compliant to 802.3ae 10GBASE-SR
 - RoHS Compliant.

1. Absolute Maximum Ratings

Any stress beyond the maximum ratings can result in permanent damage. The device specifications are guaranteed only under the recommended operating conditions.

Parameter	Symbol	Min.	Typ .	Max .	Unit
Storage Temperature	Ts	-40	-	85	°C
Relative Humidity	RH	5	-	95	%
Power Supply Voltage	VCC	-0.3	-	4	V
Signal Input Voltage		Vcc-0.3	-	Vcc+0.3	V

2. Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Case Operating Temperature	Tcase	0	-	70	°C	Commercial
Power Supply Voltage	VCC	3.14	3.3	3.47	V	

Power Supply Current	ICC	-		300	mA	
Data Rate	BR		10.3125		Gbps	
Transmission Distance	TD		-	300	m	
Coupled fiber	Multi-mode fiber					9/125um SMF

3. Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter						
Average Launched Power	Pout	-6		-0.5	dBm	1
Extinction Ratio	ER	3.0			dB	
Optical Wavelength	λ	840	850	860	nm	
RIN	RIN			-128	dB/Hz	
Output Eye Mask	Compliant with IEEE 802.3ae					
Receiver						
Input Optical Wavelength	λ_c	1270		1610	nm	
Receiver Sensitivity	Psen			-10	dBm	2
Input Saturation Power (Overload)	Psat	0.5			dBm	
LOS Assert	LOSA	-30			dBm	
LOS De-assert	LOSD			-12	dBm	
LOS Detect Hysteresis	PHYS	0.5			dB	

Notes:

1. Launched power (avg.) is power coupled into a single mode fiber with master connector.
2. Measured with conformance test signal for BER = 10^{-12} @ 10.3125Gbps, PRBS=2³¹-1,NRZ

4. Electrical Characteristics

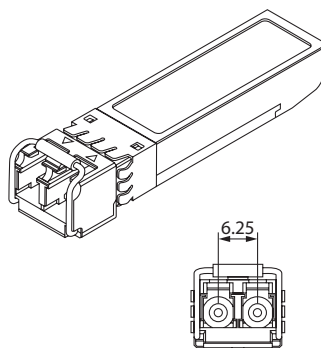
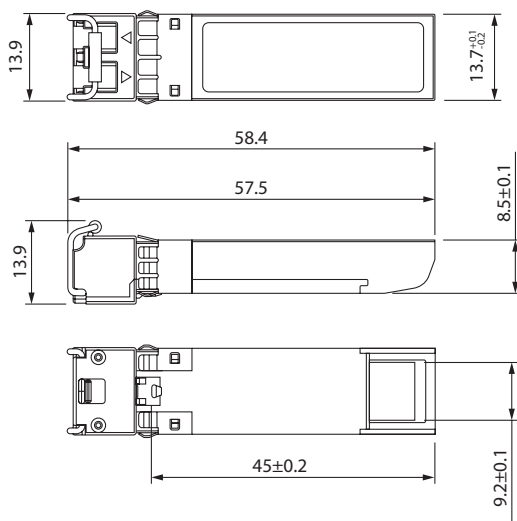
Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Supply Voltage	Vcc	3.14	3.3	3.46	V	
Supply Current	Icc			300	mA	
Transmitter						
Input differential impedance	Rin		100		Ω	1
Single ended data input swing	Vin,pp	180		700	mV	
Transmit Disable Voltage	VD	Vcc-1.3		Vcc	V	
Transmit Enable Voltage	VEN	Vee		Vee+ 0.8	V	2

Transmit Disable Assert Time				10	us	
Receiver						
Differential data output swing	Vout,pp	300		850	mV	3
Data output rise time	tr	28			ps	4
Data output fall time	tf	28			ps	4
LOS Fault	VLOS fault	Vcc-1.3		VccHOST	V	5
LOS Normal	VLOS norm	Vee		Vee+0.8	V	5
Power Supply Rejection	PSR	100			mVpp	6

Notes:

1. Connected directly to TX data input pins. AC coupled thereafter.
2. Or open circuit.
3. Into 100 ohms differential termination.
4. 20 – 80 %.
5. Loss Of Signal is LVTTTL. Logic 0 indicates normal operation; logic 1 indicates no signal detected. Receiver sensitivity is compliant with power supply sinusoidal modulation of 20 Hz to 1.5 MHz up to specified value applied through the recommended power supply filtering network.

5. Mechanical Diagram



Note: External physical characteristics are subject to variation. This may include, but is not limited to, external case designs, pull tab colors and/or shapes, removal latch styles or colors, and label sizes and placement. These variations do not affect the function or characteristics of the transceivers.

6. Ordering Information

OEM	Part Number	OEM	Part Number
Accedian	7SM-400-A	Enterasys	10GBASE-SR-SFPP-A
Accedian	7SM-500-A	Extreme	10301-A
Adtran	1700485F1-A	F5 Networks	F5-UPG-SFP+-R-A
Adtran	1442401G1-A	F5 Networks	FS-TRAN-SFP+SR-A
Adva	1061701855-01-A	Finisar	FTLX8574D3BCL-A
Adva	1061701865-02-A	Finisar	FTLX8574D3BCV-A
Adva	1061701855-02-A	Finisar	FTLF8528P2BNV-A
Alcatel	3FE63264AA-A	Finisar	FTLX8571D3BCV-A
Alcatel	3HE04824AA-A	Fortinet	FG-TRAN-SFP+SR-A
Alcatel	1AB410040001-A	Fortinet	FN-TRAN-SFP+SR-A
Alcatel	3HE0482AA-A	Fujitsu	SFPP-SR-A
Alcatel	SFP-10G-GIG-SR-A	Gigamon	SFP-532-A
Alcatel	3HE11023AA-A	HP	J9150A-A
Alcatel	SFP-10G-SR-ALCATEL-A	HP	J9150D-A
Alcatel	3FE65608AA-A	HP	10GESFPP-SR-HP
Allied Telesis	SP10SR-A	HP	J9150D-C1
Arista	SFP-10G-SR-AN-A	HP	JW091A-A
Arista	SFP-10G-SRL-AN-A	HP	10GESFPP-SR-HP
Aruba	SFP-10GE-SR-ARUBA-A	Huawei	OMXD30000-A
Avago	AFBR-709SMZ-A	Huawei	34060494-A
Avago	AFBR-700SDZ-A	Infinera	TRX100103-A
Avaya	AA1403015-E6-A	Intel	FTLX8573D3BTL-A
Brocade	XBR-000148-A	Intel	E10GSFPPSR-A
Brocade	XBR-000180-A	JDSU	PLRXPL-SE-S43-22-N-A
Brocade	10G-SFPP-SR-A	Juniper	SRX-SFP-10GE-SR-A
Brocade	10G-SFPP-USR-A	Juniper	SFP-10GE-SR-A
Brocade	10GESFPP-SR-FBR	Juniper	QFX-SFP-10GE-SR-A
Calix	100-01514-A	Juniper	SFPP-10GE-SR-A
Calix	100-01515-A	Juniper	EX-SFP-10GE-SR-A
Check Point	CPAC-TR-10SR-A	Juniper	QFX-SFP-10GE-USR-A
Ciena	XCVR-S00Z85-A	Juniper	SRX-SFPP-10G-SR-ET-A
Ciena	160-9116-900-A	Mellanox	MFM1T02A-SR-A
Cisco	ONS-SC+-10G-SR-A	Meraki	MA-SFP-10GB-SR-A
Cisco	SFP-10G-SR-A	Meraki	SFP-10GB-SR-A
Cisco	SFP-10G-SR-S-A	MRV	SFP-10GD-SX-A

Cisco	SFP-10G-SR-X-A	MSA	AN-SFP10G-SR-I
Cyan	280-0330-00-A	MSA	AN-SFP10G-SR
Dell	407-BCBN-A	MSA Champion ONE	10GSFP+E-SR
Dell	407-BBZM-A	Nokia	473842A-A
Dell	331-5311-A	Nokia	3AL82027AA-A
Dell	407-BBOU-A	OnePort	1700485F1-OP
Dell	330-2410-A	OnePort	OP-SFP10G-SR
Dell	330-2405-A	PaloAlto	PAN-SFP-PLUS-SR-A
Dell	330-8721-A	Rubrik	RBK-SFP-TSR-01-A
Dell	407-BBEF-A	Samsung	SFG-AFE000DAVZ-A

7. Contact Information

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