

Features

- Up to 1.25Gb/s bi-directional data links
- Hot-pluggable SFP footprint
- Commercial case temperature range (0°C to +70°C)
- Fully metallic enclosure for low EMI
- Low power dissipation
- Compact RJ-45 connector assembly
- Detailed product information in EEPROM
- +3.3V single power supply
- Access to physical layer IC via 2-wire serial bus
- Compliant with SFP MSA
- Compliant with IEEE Std 802.3TM-2002



- Compliant with FCC 47 CFR Part 15, Class B
- RoHS Compliant

Applications

- 1.25 Gigabit Ethernet over Cat 5 cable
- Switch/Router to Switch/Router Link
- High speed I/O for file servers

1. General Specifications

Parameter	Symbol	Min	Typical	Max	Units	Notes/Conditions
Data Rate	BR	100		1,000	Mb/s	IEEE 802.3 compatible.
Cable Length	L			100	m	Category 5 UTP. BER <10-12

2. Environmental Specifications

This transceiver has an extended range from 0°C to +85°C case temperature as specified below.

Parameter	Symbol	Min	Typ	Max	Units
Operating Temperature	Top	-0		+70	°C
Storage Temperature	Tsto	-40		100	°C

3. +3.3V Volt Electrical Power Interface

This Transceiver has an input voltage range of 3.3 V +/- 5%. The 4 V maximum voltage is not allowed for continuous operation.

Parameter	Symbol	Min	Typ	Max	Units	Notes/Conditions
Supply Current	I _s		320	375	mA	1.2W max power over full range of voltage and temperature. See below
Input	V _{cc}	3.13	3.3	3.47	V	Referenced to GND
Voltage Surge Current	I _{surge}		30		mA	Hot plug above steady state current. See caution note

WARNING: The intra-building port(s) of the equipment or subassembly is suitable for connection to intra-building or unexposed wiring or cabling only. The intra-building port(s) of the equipment or subassembly **MUST NOT** be metallically connected to interfaces that connect to the OSP or its wiring for more than 6 meters (approximately 20 feet). These interfaces are designed for use as intra-building interfaces only (Type 2, 4, or 4a ports as described in GR-1089) and require isolation from the exposed OSP cabling. The addition of Primary Protectors is not sufficient protection in order to connect these interfaces metallically to an OSP wiring system. The intra-building port(s) of the equipment or subassembly must use shielded intra-building cabling/wiring that is grounded at both ends.

Caution: Power consumption and surge current are higher than the specified values in the SFP MSA

4. Low-Speed Signals

MOD_DEF(1) (SCL) and MOD_DEF(2) (SDA), are open drain CMOS signals. Both MOD_DEF(1) and MOD_DEF(2) must be pulled up to host_V_{cc}.

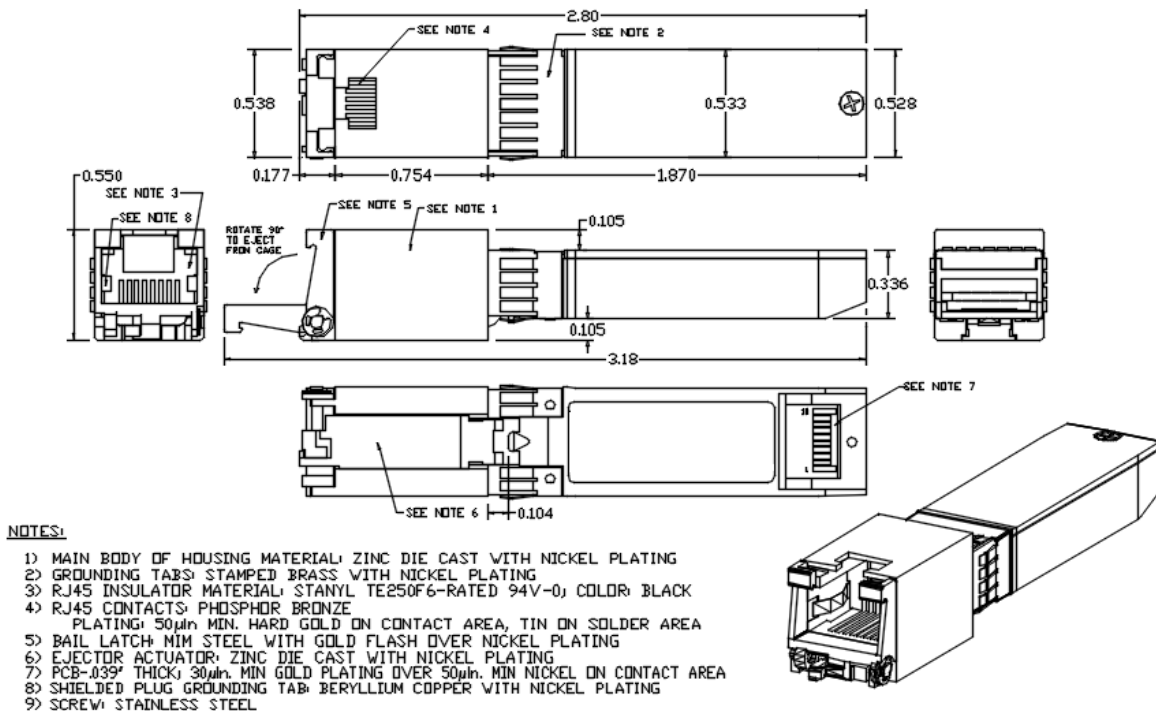
Parameter	Symbol	Min	Max	Units	Notes/Conditions
SFP Output LOW	VOL	0	0.5	V	4.7k to 10k pull-up to host_V _{cc} .
SFP Output HIGH	VOH	host_V _{cc} -0.5	host_V _{cc} + 0.3	V	4.7k to 10k pull-up to host_V _{cc} .
SFP Input LOW	VIL	0	0.8	V	4.7k to 10k pull-up to V _{cc} .
SFP Input HIGH		2	V _{cc} + 0.3 V	V	4.7k to 10k pull-up to V _{cc} .

5. High-Speed Electrical Interface

All high-speed signals are AC-coupled internally.

Parameter	Symbol	Min	Typical	Max	Units	Notes/Conditions
Transmission Line-SFP						
Line Frequency	fL		125		MHz	5-level encoding, per IEEE 802.3
Tx Output Impedance	Zout,TX		100		Ohm	Differential
Rx Input Impedance	Zin,RX		100		Ohm	Differential
Host-SFP						
Single ended data input swing	Vinsing	250		1200	mV	Single ended
Single ended data output swing	Voutsing	350	100	800	mV	Single ended
Rise/Fall Time	Tr,Tf		175		psec	20%-80%
Tx Input Impedance	Zin		50		Ohm	Single ended
Rx Output Impedance	Zout		50		Ohm	Single ended

6. 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.

7. Ordering Information

OEM	Part Number	OEM	Part Number
Accedian	7XV-000-A	Dell	407-BBEL-A
Accedian	7SV-000-A	Dell	407-BBOS-A
Accedian	7SV-100-A	Enterasys	MGBIC-02-A
Adtran	1200485G1-A	Extreme	10070H-A
Adtran	1184561P4-A	Extreme	10065-A
Adtran	1442200G1-A	F5 Networks	F5-UPG-SFPC-R-A
Adtran	1442300G1-A	Finisar	FCMJ-8521-3-A
Alcatel	3HE11904AA-A	Force10	GP-SFP2-1T-A
Alcatel	SFP-GIG-T-A	Fortinet	FN-TRAN-GC-A
Alcatel	3HE00062CB-A	Fortinet	FS-TRAN-GC-A
Alcatel	3HE00062AA-A	Fortinet	FG-TRAN-GC-A
Alcatel	109565549-A	Fujitsu	HCT01D01E0000-0-A
Alcatel	ISFP-GIG-T-A	HP	453578-001-A
Alcatel	3FE28784AA-A	HP	378928-B21-A
Alcatel	3HE00062CB-01-A	Huawei	SFP-T-A
Alcatel	1AB359780001-A	Huawei	34100052-A
Allied Telesis	AT-SPTX-A	Infinera	TRX100025-A
Arista	SFP-1G-T-A	Intel	E1GSFPT-A
Arris	551771-002-00-A	Juiper	EX-SFP-1GE-FE-E-T-A
Aruba	SFP-TX-A	Juniper	SRX-SFP-1GE-T-A
Avago	ABCU-5740ARZ-A	Juniper	QFX-SFP-1GE-T-A
Avago	ABCU-5710RZ-A	Juniper	EX-SFP-1GE-T-A
Avago	ABCU-5740RZ-A	Juniper	SRX-SFP-1GE-T-ET-A
Avaya	700283872-A	Juniper	SFP-1GE-FE-E-T-A
Brocade-Foundry	E1MG-TX-A	Juniper	SFP-1GE-T-A
BTI	BP3AD3ES-A	Linksys	MGBT1-A
Calix	100-01661-A	Mellanox	MC3208411-T-A
Calix	100-01661-01-A	Meraki	MA-SFP-1GB-TX-A
Ciena	XCVR-B00CRJ-A	MSA	AN-SFP-T
Ciena	NTTP61AA-A	MSA	AN-SFP-TE
Ciena	XCVR-A00CRJ-A	MSA	AN-SFP-TM
Ciena	XCVR-A00CRJ-T-A	MSA	AN-SFP-TME
Cisco	SFP-GE-T-ASR-A	MRV	SFP-GA-R-A
Cisco	SFP-GE-T-N-A	MRV	SFP-GC-R-A
Cisco	GLC-TE-A	Netgear	AGM734-A

Cisco	GLC-T-A	Nortel	AA1419043-E6-A
Cisco	DS-SFP-GE-T-A	OnePort	OP-SFP-TM-U
Cisco	SFP-GE-T-A	Palo Alto	PAN-SFP-CG-A
Cyan	280-0081-00-A	Telco	BTI-MGBIC-GTX-A
Cyan	280-0017-00-A	Transition Networks	TN-GLC-T-A
MSA Champion ONE	1000SFPtr2	Transition Networks	TN-MG-A
MSA Champion ONE	MR-SFPSGT	MSA Champion ONE	1000SFPT

8. Contact Information

Tel: 800.590.9535

Web: <http://www.approvednetworks.com>