



Features

- Supports up to 10.7Gbps bit rates
- Hot-pluggable SFP+ footprint
- 1330nm DFB laser and PIN photodiode, Up to 20km for SMF transmission
- Compliant with SFP+ MSA and SFF-8472 with duplex LC receptacle
- Compatible with RoHS
- Single +3.3V power supply
- Real Time Digital Diagnostic Monitoring
- Case operating temperature range:
 Commercial: 0°C to +70°C
 Industrial: -40°C to +85°C

Applications

- 10Gbps Optical systems
- 10GBASE-LR at 10.3125Gbps
- 10GBASE-LW at 9.953Gbps
- LTE systems
- Other Optical links

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	Max	Unit
Supply Voltage	Vcc	-0.5	4.5	V
Storage Temperature	Ts	-40	+85	°C
Operating Humidity	-	5	85	%

2. Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Unit
Case Operating Temperature	TC	0		70	°C
		-40		85	
Power Supply Voltage @3.3V	Vcc	3.135	3.30	3.465	V

Power Supply Current	I _{cc}			350	mA
Data Rate	1.0	10.3	10.7		Gbps

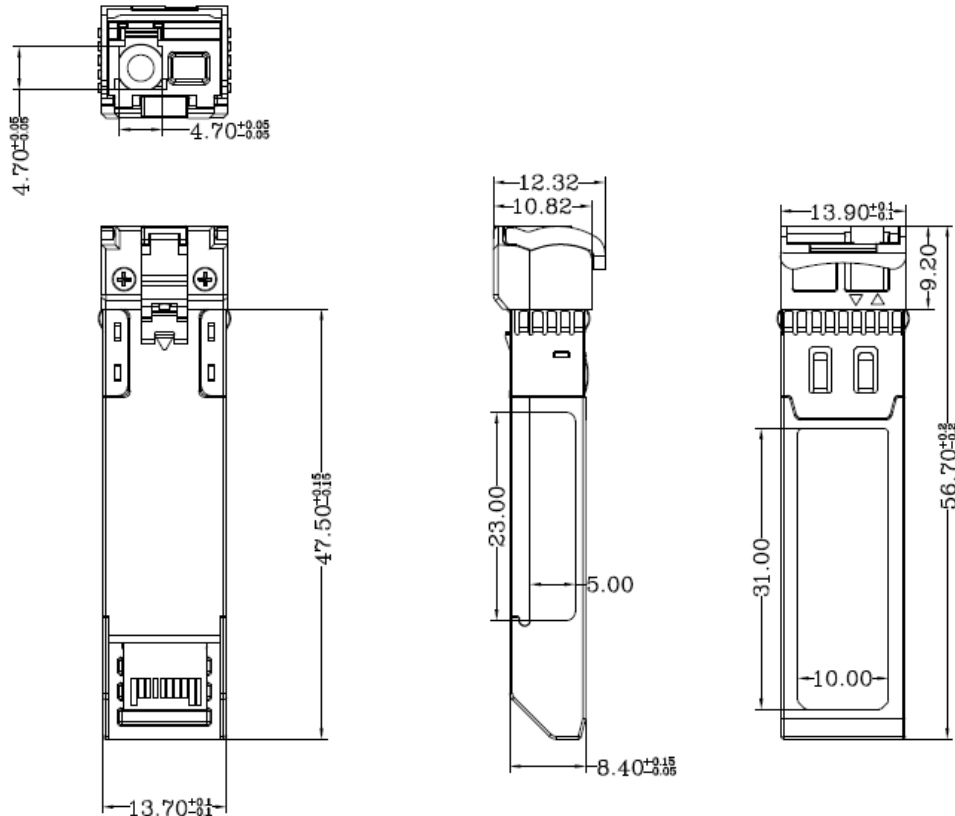
3. Optical and Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Notes
Transmitter						
Centre Wavelength	λ_c	1320	1330	1340	nm	
Spectral Width (-20dB)	$\Delta\lambda$			1	nm	
Side-Mode Suppression Ratio	SMSR	30			dB	
Average Output Power	P _{out}	-3		+2	dBm	1
Extinction Ratio	ER	3.5			dB	
Data Input Swing Differential	V _{IN}	180		850	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}	
	Normal		0		0.8	
Receiver						
Centre Wavelength	λ_c	1260	1270	1280	nm	
Receiver Sensitivity				-14.4	dBm	3
Receiver Overload		0.5			dBm	3
LOS De-Assert	LOSD			-15.5	dBm	
LOS Assert	LOSA	-30			dBm	
LOS Hysteresis		0.5			dB	
Data Output Swing Differential	V _{out}	300		900	mV	4
LOS	High	2.0		V _{cc}	V	
	Low			0.8	V	

Notes:

1. The optical power is launched into SMF.
2. PECL input, internally AC-coupled and terminated.
3. Measured with a PRBS 2³¹-1 test pattern @10312 Mbps, BER ≤1×10⁻¹².
4. Internally AC-coupled.

4. 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.

5. Ordering Information

OEM	Part Number	OEM	Part Number
Accedian	7SN-500-BXD-A	Extreme	10GS-B33-10-EXN*
Adtran	1442412F1-A	F5 Networks	F5UPGSFP+LRR-BXD-A
Adtran	1442422F1-A	HP	10GS-B33-10-HP*
Adva	1061701888-01-A	Juniper	EX-SFP-10GE-BXD-A
Alcatel	3HE05037AB-A	Juniper	EX-SFP-10GE-BXD-10-A
Arista	SFP-10G-BX10D-AN-A	Juniper	EX-SFP-10GE-BXD-20-A
Arista	SFP-10G-BX20D-AN-A	Juniper	QFX-SFP-10GE-BXD-10-A
Arista	SFP-10G-LR-AN-BXD-A	Juniper	JNP-SFP-10G-BX10D-A
Avaya	AA1403170-E6-A	Juniper	JNP-SFP-10G-BX20D-A
Brocade	10G-SFPP-BXD-A	Juniper	JNP-SFP-10G-BX20D-C1

Brocade	XBR-000153-BXD-A	Juniper	JNP-SFP-10GE-BX10D-A
Calix	100-02169-A	Juniper	SFPP-10GE-BXD-A
Calix	100-03499-A	Juniper	SRX-SFP-10GE-BXD10-A
Calix	10GS-B33-20I-CLX	Juniper	JNP-SFP-10G-BX10D-C1*
Ciena	XCVR-S10U33-A	Meraki	MA-SFP-10GB-BXD-A
Ciena	XCVR-S10U33-C1	MikroTik	S+32LC10D-A
Cisco	SFP-10G-BXD-C-A	MikroTik	S+32LC20D-A
Cisco	SFP-10G-BXD-C-C1*	MRV	SFP-10GDBX32-A
Cisco	SFP-10G-BX20D-C-A	MSA Champion ONE	10GSFP+E33B10L*
Cisco	SFP-10G-BXD-I-A	MSA Champion ONE	10GSFP+E33B10L-H*
Cisco	SFP-10G-BX20D-I-A	MSA Champion ONE	10GSFP+E33B10L2H*
Cisco	10GS-B33-10-CSC*	MSA Champion ONE	10GSFP+E33B20L
Cisco	SFP-10G-BXD-I-C1*	MSA Champion ONE	10GSFP+CMR33B10L*
Cisco	SFP-10G-BX20D-C-C1	MSA Champion ONE	10GSFP+CMR33B20L
Cisco	10GS-B33-10I-CSC*	MSA Champion ONE	10GSFP+E33B20L-H
Corning	1LAN-SFPP-10G-BXD-I-A	MSA Generic	AN-SFP10G-BXD-10-I
Cyan	280-0350-00-A	MSA Generic	AN-SFP10G-BXD-20-I
Dell	407-BBOP-32-10-A	OnePort	OP-SFP10G-BX32-20-A*
Ericsson	RDH10270/2-A	Palo Alto	PAN-SFP-PLUS-BXD-A
Extreme	10302-BXD-10-A	ROBOFiber	SFP-1020-WB-A
Extreme	10GB-BX10-D-A	Ubiquiti Networks	UF-SM-10G-BX32-20K-A
Extreme	10GB-BX10-D-C1*		

*Part has a 10km reach

6. Contact Information

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