

Features

- Supports up to 10.7Gbps bit rates
- Hot-pluggable SFP+ footprint
- 1270nm 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
- CPRI / eCPRI

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	Commercial	TC	0		70	°C
	Industrial		-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

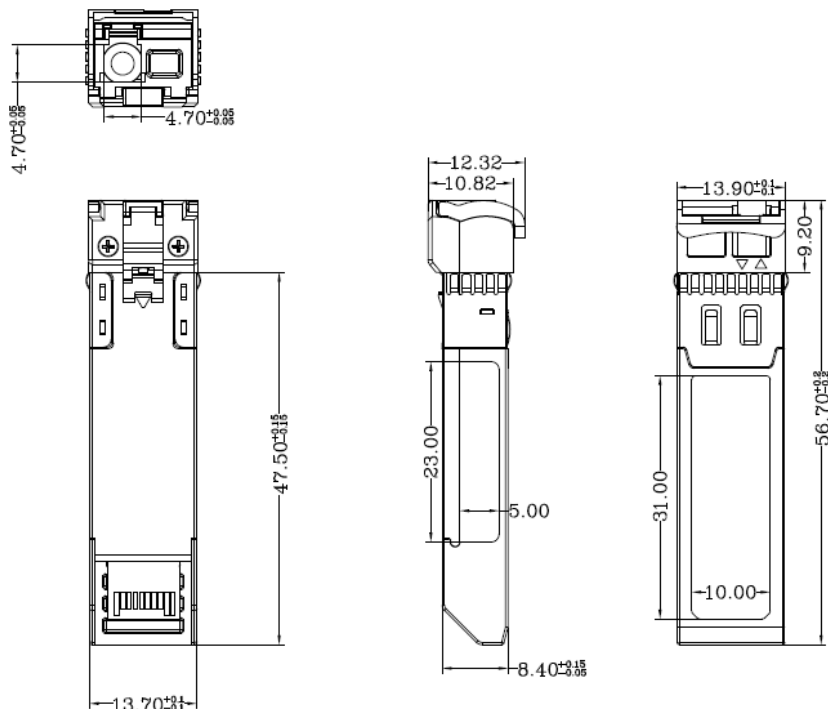
3. Optical and Electrical Characteristics

Parameter		Symbol	Min	Typ	Max	Unit	Notes
Transmitter							
Centre Wavelength		λ_c	1260	1270	1280	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	1320	1330	1340	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 $\leq 1 \times 10^{-12}$.
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-BXU-A	JDSU	PLRXPL-VC-SH4-23-N-A
Adtran	1442412F2-A	JDSU	PLRXPL-VE-SG4-62-N-A
Adtran	1442422F2-A	JDSU	PLRXPL-VI-S24-22-A
Adva	1061701887-01-A	Juniper	EX-SFP-10GE-BXU-A
Alcatel	3HE05037AA-A	Juniper	EX-SFP-10GE-BXU-10-A*
Alcatel	3HE05037AA-20-A	Juniper	JNP-SFP-10G-BX10U-A*
Arista	SFP-10G-BX10U-AN-A	Juniper	JNP-SFP-10GE-BX10U-A*
Arista	SFP-10G-BX20U-AN-A	Juniper	QFX-SFP-10GE-BXU-10-A*
Avaya	AA1403011-BXU-A	Juniper	SFPP-10GE-BXU-A*
Avaya	AA1403169-E6-A	Juniper	SRX-SFP-10GE-BXU10-A*
Brocade	10G-SFPP-BXU-A	Juniper	EX-SFP-10GE-BXU-20-A
Brocade	XBR-000153-BXU-A	Juniper	JNP-SFP-10G-BX20U-A*
Calix	100-03498-A	Juniper	JNP-SFP-10GE-BX20U-A*
Calix	100-02168-A	Juniper	QFX-SFP-10GE-BXU-20-A*

Calix	10GS-B27-20I-CLX	Juniper	EX-SFP-10GE-BXU-20-C1
Calix	100-03498-C1*	Juniper	JNP-SFP-10G-BX20U-C1
Ciena	XCVR-S10U27-A	Meraki	MA-SFP-10GB-BXU-A*
Cisco	SFP-10G-BXU-I-A	Meraki	MA-SFP-10GB-BXU-20-A
Cisco	SFP-10G-BXU-I-C1*	MikroTk	S+23LC10U-A*
Cisco	SFP-10G-BX20U-C-A	MikroTk	S+23LC20U-A
Cisco	SFP-10G-BX20U-I-A	MRV	SFP-10GDBX23-A*
Cisco	10GS-B27-10-CSC*	MSA Champion ONE	10GSFP+E27B10L
Cisco	SFP-10G-BX20U-C-C1	MSA Champion ONE	10GSFP+E27B10L-H
Cisco	10GS-B27-10I-CSC*	MSA Champion ONE	10GSFP+E27B10L2H*
Corning	1LAN-SFPP-10G-BXU-I-A	MSA Champion ONE	10GSFP+E27B20L
Cyan	280-0336-00-A	MSA Champion ONE	10GSFP+E27B20L-H
Dell	407-BBOP-23-10-A*	MSA Champion ONE	10GSFP+CMR27B10L*
Dell	407-BBOP-23-20-A	MSA Champion ONE	10GSFP+CMR27B20L
Ericsson	RDH10270/1-A	MSA Generic	SFP10G-BXU-10-I*
Extreme	10GB-BX10-U-A*	MSA Generic	SFP10G-BXU-20-I
Extreme	10302-BXU-10-A*	MSA OnePort	SFP10G-BX23-20
Extreme	10302-BXU-20-A	Palo Alto	PAN-SFP-PLUS-BXU-A*
Extreme	10GB-BX10-U-C1*	Samsung	SLS-BB1150ELEX-A*
Extreme	10GS-B27-10-EXN*	Samsung	SLS-BB1150EMEX-A*

*Part has a reach of 10km

6. Contact Information

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