



Features

- Supports up to 10.7Gbps bit rates
- Hot-pluggable SFP+ footprint
- 1270nm DFB laser and APD photodiode, Up to 60km 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
- Operating case temperature:
 Standard: 0 to +70°C
 Industrial: -40 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

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
Operating Case Temperature	Tc	0		+70	°C
		-20		+80	°C
		-40		+85	°C

Power Supply Voltage	Vcc	3.135	3.30	3.465	V
Power Supply Current	Icc			450	mA
Data Rate		1.0	10.3	10.7	Gbps

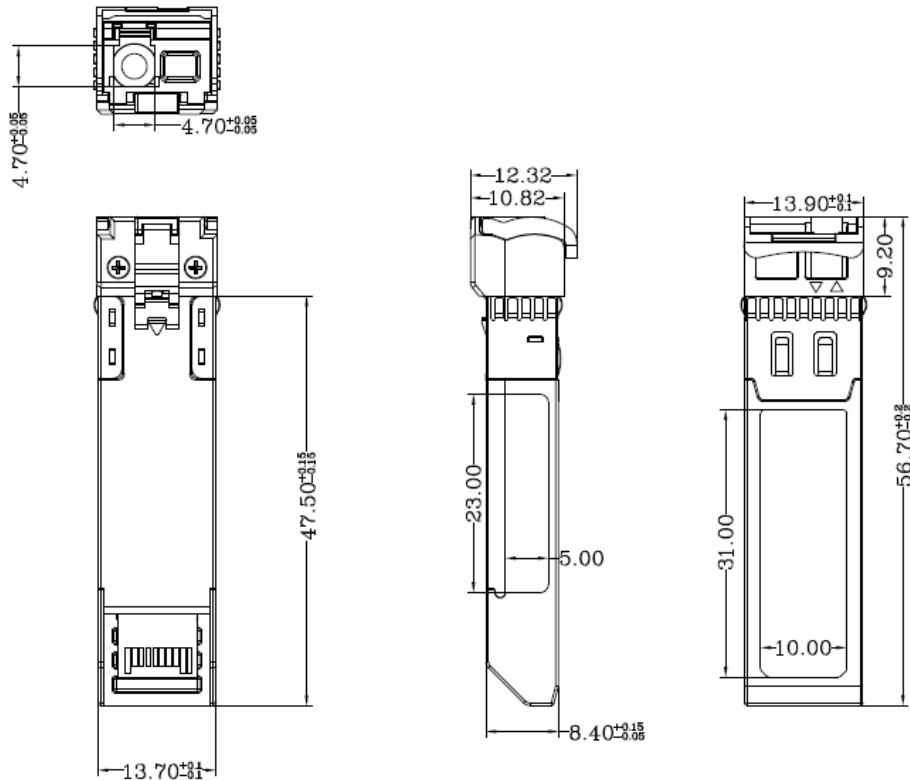
3. Optical and Electrical Characteristics

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	Pout	+1		+6	dBm	1
Extinction Ratio	ER	3.5			dB	
Data Input Swing Differential	VIN	180		850	mV	2
Input Differential Impedance	ZIN	90	100	110	Ω	
TX Disable	Disable	2.0		Vcc	V	
	Enable	0		0.8	V	
TX Fault	Fault	2.0		Vcc	V	
	Normal	0		0.8	V	
Receiver						
Centre Wavelength	λ_c	1260	1270	1280	nm	
Receiver Sensitivity				-20	dBm	3
Receiver Overload		-6			dBm	3
LOS De-Assert	LOSD			-21	dBm	
LOS Assert	LOSA	-35			dBm	
LOS Hysteresis		0.5			dB	
Data Output Swing Differential	Vout	300		900	mV	4
LOS	High	2.0		Vcc	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 @10312Mbps, 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
Adtran	1442413F1-A	Juniper	EX-SFP-10GE-BXD-60-A
Arista	SFP-10G-BX60D-AN-A	Juniper	JNP-SFP-10GE-BX60D-A
Brocade	10G-SFPP-BXD-60-A	MSA Generic	AN-SFP10G-BX32-60-I
Cisco	SFP-10G-BX60D-I-A	MSA OnePort	OP-SFP10G-BX32-60
Cisco	10GS-B33-60-CSC	MSA Champion ONE	10GSFP+E33B60L
Extreme	10302-BXD-60-A	MSA Champion ONE	10GSFP+E33B60L-H
		MSA Champion ONE	10GSFP+E33B60L2H

6. Contact Information

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