

## Features

- Supports up to 10.7Gbps bit rates
- Hot-pluggable SFP+ footprint
- 1330nm DFB laser and PIN photodiode, Up to 40km 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
- Industrial Operating case temperature: -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

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
Operating Case Temperature   Industrial	Tc	-40		+85	°C
Power Supply Voltage @3.3V	Vcc	3.135	3.30	3.465	V
Power Supply Current	Icc			350	mA
Data Rate	1.0	10.3	10.7		Gbps

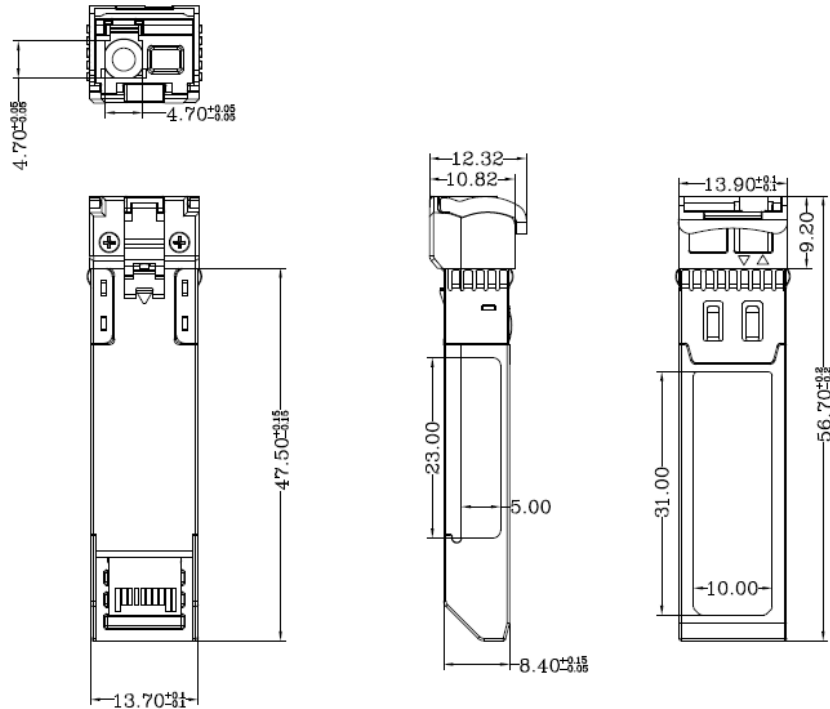
### 3. Optical and Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Notes
<b>Transmitter</b>						
Centre Wavelength	$\lambda_c$	1320	1330	1340	nm	
Spectral Width (-20dB)	$\Delta\lambda$			1	nm	
Side-Mode Suppression Ratio	SMSR	30			dB	
Average Output Power	Pout	-1		+5	dBm	1
Extinction Ratio	ER	3.5			dB	
Data Input Swing Differential	VIN	180		850	mV	2
Input Differential Impedance	ZIN	90	100	110	$\Omega$	
TX Disable	Disable		2.0	Vcc	V	
	Enable		0	0.8	V	
TX Fault	Fault		2.0	Vcc		
	Normal		0	0.8		
<b>Receiver</b>						
Centre Wavelength	$\lambda_c$	1260	1270	1280	nm	
Receiver Sensitivity				-15	dBm	3
Receiver Overload		0.5			dBm	3
LOS De-Assert	LOSD			-16	dBm	
LOS Assert	LOSA	-30			dBm	
LOS Hysteresis		0.5			dB	
Data Output Swing Differential	Vout	300		900	mV	
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 2<sup>31</sup>-1 test pattern @10312 Mbps, BER ≤1×10<sup>-12</sup>.

## 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	7SU-401-A	Cisco	10GS-B33-40-CSC
Adtran	1442442F1-A	Enterasys	10GB-BX40-D-A
Adva	1061701890-01-A	Ericsson	RDH10270/2-40-A
Alcatel	3HE10452AB-A	Juniper	EX-SFP-10GE-BXD-40-A
Calix	100-02151-A	Juniper	JNP-SFP-10G-BX40D-A
Calix	100-02151-C1	Juniper	JNP-SFP-10G-BX40D-C1
Calix	10GS-B33-40I-CLX	Juniper	XCVR-S40U33-C1
Ciena	XCVR-S40U33-A	MSA Generic	AN-SFP10G-BX32-40-I
Ciena	XCVR-S40U33-C1	MSA OnePort	OP-SFP10G-BX32-40
Cisco	SFP-10G-BX40D-C-A	MSA Champion ONE	10GSFP+E33B40L-H
Cisco	SFP-10G-BX40D-C-C1	MSA Champion ONE	10GSFP+E33B40L
Cisco	SFP-10G-BX40D-I-A	MSA Champion ONE	10GSFP+E33B40L2H
Cisco	10GS-B33-40I-CSC	Nokia	473543B-A

## 6. Contact Information

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