

## Features

- Supports up to 10.7Gbps bit rates
- Hot-pluggable SFP+ footprint
- 1270nm 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
- Operating case temperature:  
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

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

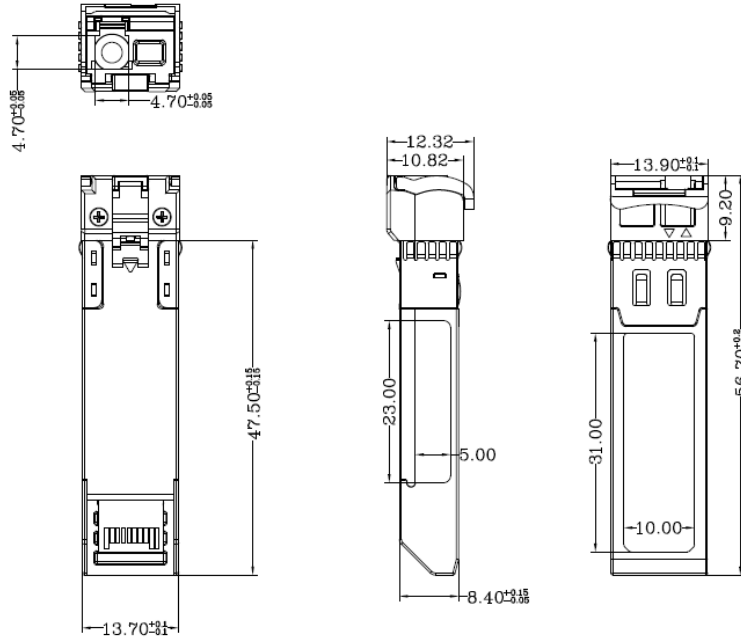
### 3. Optical and Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Notes
<b>Transmitter</b>						
Centre Wavelength	$\lambda_c$	1260	1270	1280	nm	
Spectral Width (-20dB)	$\Delta\lambda$			1	nm	
Side-Mode Suppression Ratio	SMSR	30			dB	
Average Output Power	P <sub>out</sub>	-1		+5	dBm	1
Extinction Ratio	ER	3.5			dB	
Data Input Swing Differential	V <sub>IN</sub>	180		950	mV	2
Input Differential Impedance	Z <sub>IN</sub>	90	100	110	$\Omega$	
TX Disable	Disable		2.0		V <sub>cc</sub>	V
	Enable		0		0.8	V
TX Fault	Fault		2.0		V <sub>cc</sub>	
	Normal		0		0.8	
<b>Receiver</b>						
Centre Wavelength	$\lambda_c$	1320	1330	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	V <sub>out</sub>	300		900	mV	
LOS	High		2.0		V <sub>cc</sub>	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	7ST-401-A	Cisco	10GS-B27-40I-CSC
Adtran	1442442F2-A	Cisco	SFP-10G-BX40U-C-C1
Adva	1061701889-01-A	Cisco	SFP-10G-BX40U-I-A
Alcatel	3HE10452AA-A	Enterasys	10GB-BX40-U-A
Alcatel	3HE05037AA-40-A	Ericsson	RDH10270/1-40-A
Alcatel	10GS-B27-40I-ALU	Juniper	EX-SFP-10GE-BXU-40-A
Arista	SFP-10G-BX40U-AN-A	Juniper	JNP-SFP-10G-BX40U-A
Brocade	10G-SFPP-BXU-40-A	Juniper	JNP-SFP-10G-BX40U-C1
Calix	100-02150-A	Juniper	SFPP-10GE-BXU-40-A
Calix	100-02150-C1	MSA Generic	AN-SFP10G-BXU-40-I
Calix	10GS-B27-40I-CLX	OnePort	OP-SFP10G-BX23-40
Ciena	160-9108-900-A	Nokia	473544B-A
Ciena	XCVR-S40U27-A	MSA Champion ONE	10GSFP+E27B40L
Ciena	XCVR-S40U27-C1	MSA Champion ONE	10GSFP+E27B40L-H
Cisco	10GS-B27-40-CSC	MSA Champion ONE	10GSFP+E27B40L2H

## 6. Contact Information

Tel: 800.590.9535

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