

## Features:

- Up to 25.78Gbp/s Data Links
- Up to 20 km transmission on SMF
- 1330 nm/1270 nm DFB Laser and PIN receiver
- Metal enclosure, for lower EMI
- 2-wire interface with integrated Digital Diagnostic monitoring
- Hot-pluggable SFP28 footprint
- Build-in dual CDR with TX and RX 25G/10G Auto-speed Switch
- Specifications compliant with SFF 8472
- Single 3.3V power supply
- Power dissipation < 1.2 W
- Case operating temperature: -40°C to +85°C



## Applications:

- 25GBASE-LR
- eCPRI and CPRI

## Standard:

- Compliant with SFF-8472 & 8431
- RoHS Compliant

## 1. Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Storage Temperature	Ts	-40	-	85	°C	
Relative Humidity	RH	5	-	95	%	
Power Supply Voltage	VCC	-0.3	-	4	V	
Signal Input Voltage	VSI	Vcc-0.3	-	Vcc+0.3	V	
Rx Damage Threshold	PRdmg	3			dBm	

## 2. Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Case Operating Temperature	Tcase	-40	-	85	°C	
Power Supply Voltage	VCC	3.14	3.3	3.47	V	

Power Supply Current	ICC			360	mA	
Data Rate	BR		25.78		Gbps	TX Rate/RX Rate
Transmission Distance	TD			20	km	
Coupled fiber	Single mode fiber					9/125um SMF

### 3. Optical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
<b>Transmitter</b>						
Average Launched Power	PO	-3		3	dBm	
Average Launched Power (Laser Off)	Poff	-	-	-30	dBm	
Center Wavelength Range	$\lambda_C$	1320		1340	nm	
Spectrum Bandwidth (-20dB)	$\Delta\lambda$	-	-	1	nm	
Side-Mode Suppression Ratio	SMSR	30	-	-	dB	
Extinction Ratio	ER	3.5		-	dB	1
Output Eye Mask	{0.31,0.4,0.45,0.34,0.38,0.4}					
<b>Receiver</b>						
Center Wavelength Range	$\lambda_C$	1260	-	1280	nm	
Input Saturation Power (Overload)	PSAT	2.5	-		dBm	2
Receiver Sensitivity	Psen	-	-	-13.3	dBm	2
Los Of Signal Assert	PA	-30	-	-	dBm	
Los Of Signal De-assert	PD	-	-	-15	dBm	
LOS -Hysteresis	PHys	0.5		6	dB	

#### Notes:

1. Measured with a PRBS 231-1 test pattern, @25.78Gb/s.
2. Measured with Light source 1310nm; BER =<5X10-5 @PRBS=231-1 NRZ.

### 4. Electrical Interface Characteristics

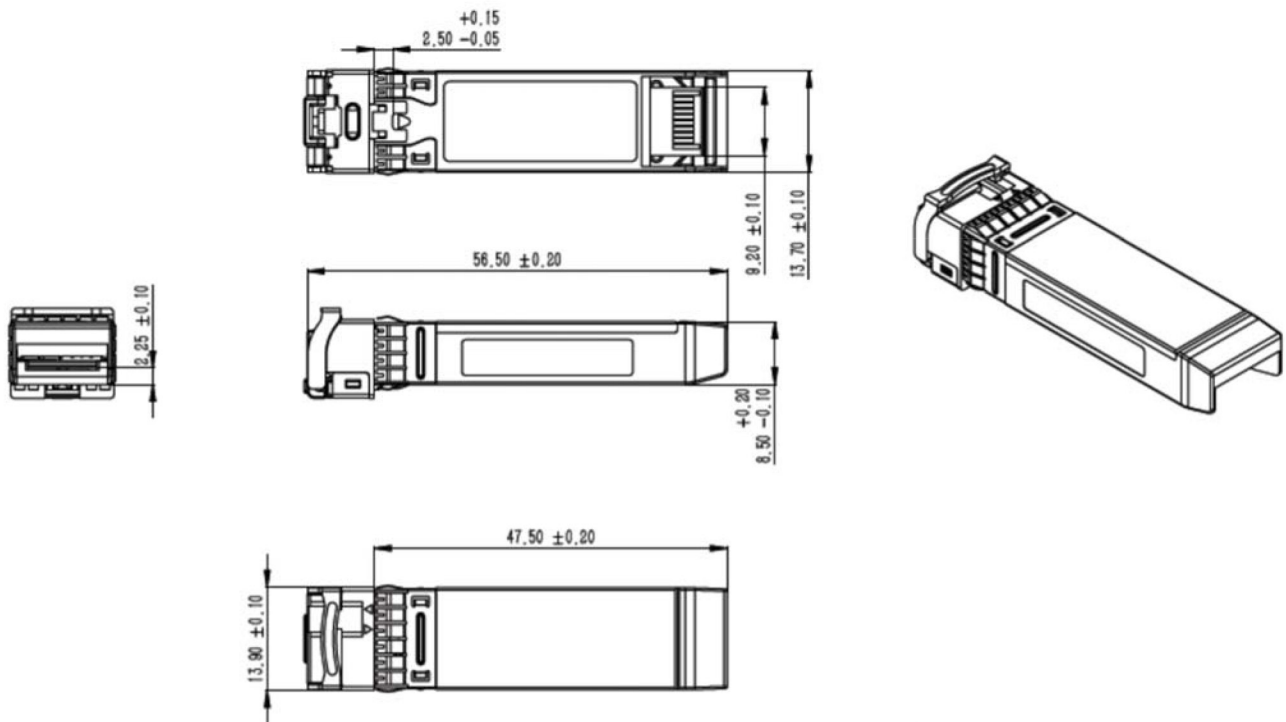
Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
<b>Transmitter</b>						
Input differential impedance	Rin		100		$\Omega$	1
Single ended data input swing	Vin,pp	180		700	mV	
Transmitter Fault Output-High	VFaultH	2	-	Vcc+0.3	V	
Transmitter Fault Output-Low	VFaultL	0	-	0.8	V	

Transmitter Disable Voltage- High	VDisH	2	-	Vcc+0.3	V	
Transmitter Disable Voltage-Low	VDisL	0	-	0.8	V	
<b>Receiver</b>						
Differential data output swing	Vout,pp	300		850	mV	2
LOS Output Voltage-High	VLOSH	2	-	Vcc+0.3	V	
LOS Output Voltage-Low	VLOSL	0	-	0.8	V	

**Notes:**

1. Connected directly to TX data input pins. AC coupled thereafter.
2. Into 100 ohms differential termination.

**5. 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.

## 6. Ordering Information

OEM	Part Number	OEM	Part Number
Cisco	SFP-10/25G-BXU-I-A	MSA	AN-SFP1025GBX32-20
Fujitsu	HCD25B15I0133-0-A	MSA Champion ONE	25GSFPEA33B20L-H

## 7. Contact Information

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