

Features:

- Up to 25.78Gbp/s Data Links
- Up to 20 km transmission on SMF
- 1270 nm/1330 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
Transmitter						
Average Launched Power	PO	-3		3	dBm	
Average Launched Power (Laser Off)	Poff	-	-	-30	dBm	
Center Wavelength Range	λC	1260	-	1280	nm	1270Tx/1330Rx
		1320		1340	nm	1330Tx/1270Rx
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}					
Receiver						
Center Wavelength Range	λC	1320		1340	nm	1270Tx/1330Rx
		1260	-	1280	nm	1330Rx/1270Tx
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

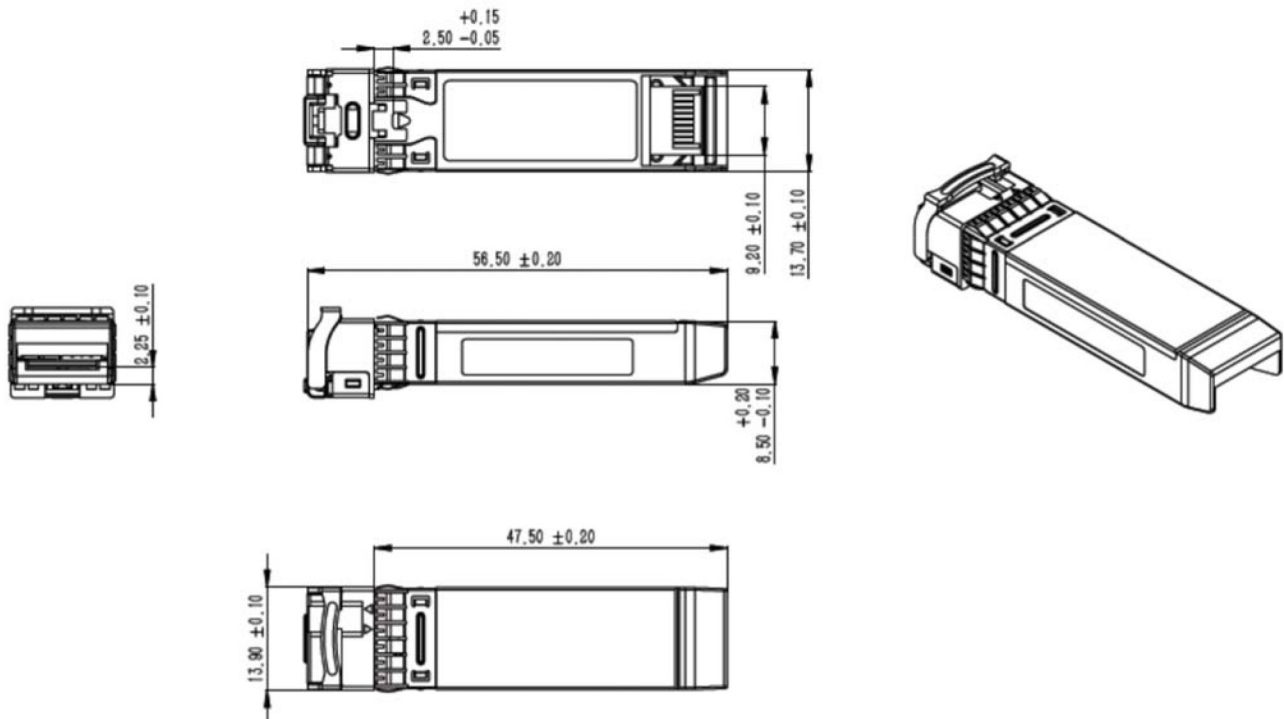
Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Transmitter						
Input differential impedance	Rin		100		Ω	1
Single ended data input swing	Vin,pp	180		700	mV	
Transmitter Fault Output-High	VFaultH	2	-	Vcc+0.3	V	

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	
Receiver						
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-BXD-I-A	MSA	AN-SFP1025GBX23-20
Fujitsu	HCD25B15I0127-0-A	MSA Champion ONE	25GSFPEA27B20L-H

7. Contact Information

Tel: 800.590.9535

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