

Features:

- 100m over M5F MMF (50/125 um OM4)
- 70m over M5E MMF (50/125 um OM3)
- VCSEL 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
- Single 3.3V power supply
- Power dissipation < 1.2 W
- Case operating temperature: -40°C to +85°C



Applications:

- 25GBASE-SR
- 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	70	m	OM3 MMF	

3. Optical Characteristics

Parameter	Symbol	Unit	Min	Typ	Max	Notes
Transmitter						
Signaling rate	DR	Gb/s	25.78125 ±100 ppm			
Center Wavelength	λ	nm	840	850	860	
RMS Spectral Width	RSW	nm		0.6		
Average launch power	Pavg	dBm	-8.4		2.4	
Optical modulation amplitude (OMA)	OMA	dBm	-6.4		3	
Extinction ratio	ER	dB	2			
Average Launch Power of OFF Transmitter	Poff	dBm			-30	
Transmitter and Dispersion Eye Closure @25.7Gb/s	TDEC				4.3	
Optical return loss tolerance		dB			12	
Transmitter eye mask {X1, X2, X3, Y1, Y2, Y3}			{0.3,0.38,0.45,0.35,0.41,0.5}			1
Receiver						
Receive Rate	DR	Gb/s	25.78125 ±100 ppm			
Wavelength Range	λ	nm	840		860	
Overload Input Optical Power	Pmax	dBm	3.4			
Average Receive Power	Pin	dBm	-10.3		2.4	2
Rx Sensitivity@25.78 Gb/s (OMA)	RSENS	dBm			-10	
Receiver Reflectance	REFLr	dB			-12	
Loss De-Assert	Pd	dBm			-11	
Loss Assert	Pa	dBm	-30			
Loss Hysteresis	Pd-Pa	dBm	0.5			

Notes:

1. Hit Ratio 1.5×10^{-3} hits/sample.
2. Minimum value is informative only and not the principal indicator of signal strength.

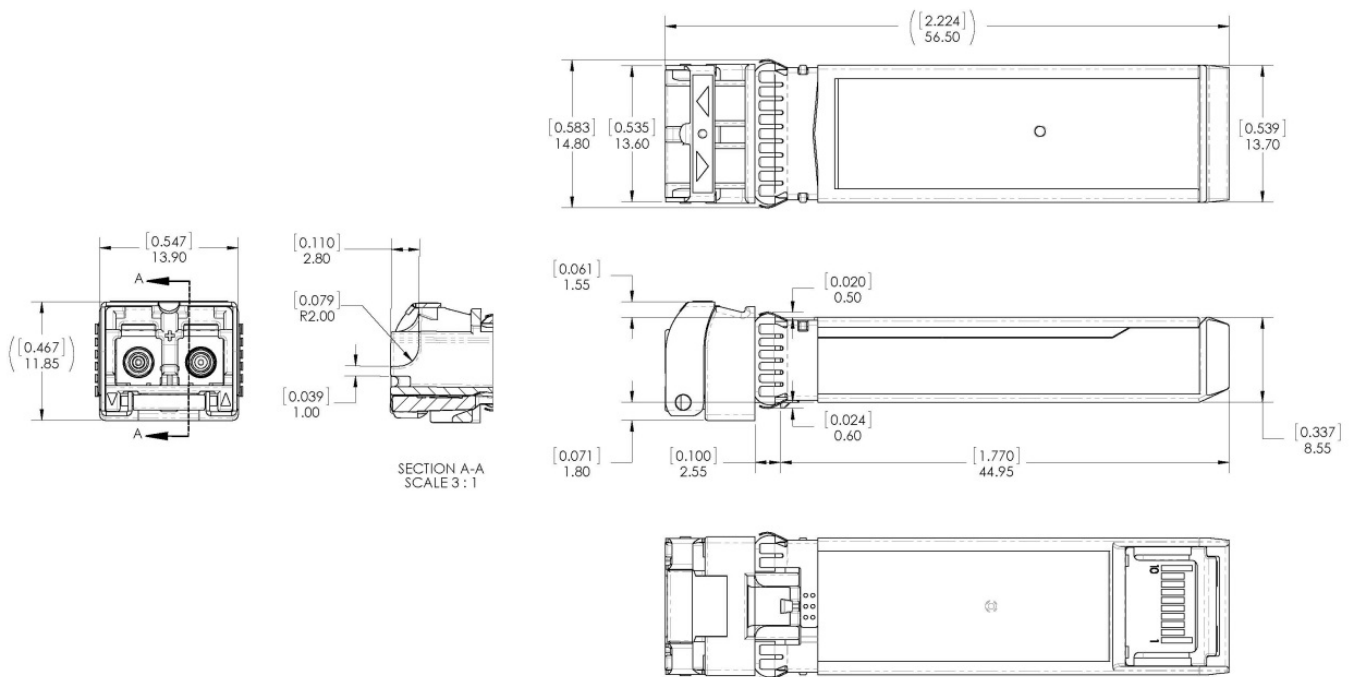
4. Electrical Interface Characteristics

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.

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.

7. Ordering Information

OEM	Part Number	OEM	Part Number
Avago	AFBR-725ADMZ-A	Mellanox	MMA2P00-AS-A
Cisco	SFP-10/25G-CSR-S-A	MSA	AN-SFP1025G
Dell	407-BCHI-A	OnePort	OP-SFP1025G-SR-I
Intel	E25GSFP28SR-A		

8. Contact Information

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