

Features

- Operating data rate up to 25.78Gbps
- Up to 40km transmission distance
- High sensitivity APD photodiode and TIA Rate Adaptation
- LC single connector
- Hot pluggable 20pin connector
- Low power consumption <1.5 W
- Single +3.3V±5% power supply
- Compliant with SFF-8472& IEEE 802.3cc
- Fully RoHS Compliant



- Operating temperature range:
Commercial: 0°C to +70°C
Industrial: -40°C to +85°C

Applications

- 25GE BASE-ER Ethernet
- CPRI Option 10/eCPRI

1. Absolute Maximum Ratings

Exceeding any one of these values may destroy the device permanently.

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	TS	-40	+85	°C
Operating Relative Humidity (Non Condensing)	RH	0	85	%

2. Recommended Operating Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Power Supply Voltage	Vcc	V	3.14	3.3	3.46
Bit Rate	BR	Gb/s		25.78	
Bit Error Ratio	BER				5*10-5
Max Supported Link Length	L	Km			40

3. Performance Specifications - Electrical

Parameter	Symbol	Unit	Min	Typ	Max
Transmitter					
Input Differential Impedance	RIN	Ω		100	
Single-ended Data Input Swing	VIN	mVp-p	90		450
Transmit Disable Voltage	VDIS	V	2		VCCHOST
Transmit Enable Voltage	VEN	V	VEE		VEE+0.8
Transmit Fault Assert Voltage	VFA	V	2		VCCHOST
Transmit Fault De-Assert Voltage	VFDA	V	VEE		VEE+0.4
Receiver					
Single-ended Data Output Swing	VOD	mVp-p	200		450
LOS Fault	VLOSFT	V	2		VCCHOST
LOS Normal	VLOSNR	V	VEE		VEE+0.4

4. Transmitter Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
Center Wavelength	λ	1290		1330	nm
Side-mode Suppression Ratio	SMSR	30			dB
Average Optical Power	Pavg	0		6	dBm
Optical Modulation Amplitude	TxOMA	0			dBm
Transmitter and Dispersion Penalty	TDP			2.7	dB
Average Launch Power of OFF Transmitter	Poff			-20	dBm
Extinction Ratio	ER	4		dB	
Optical Return Loss Tolerance				20	dB
Transmitter Reflectance				-26	dB

5. Receiver Characteristics

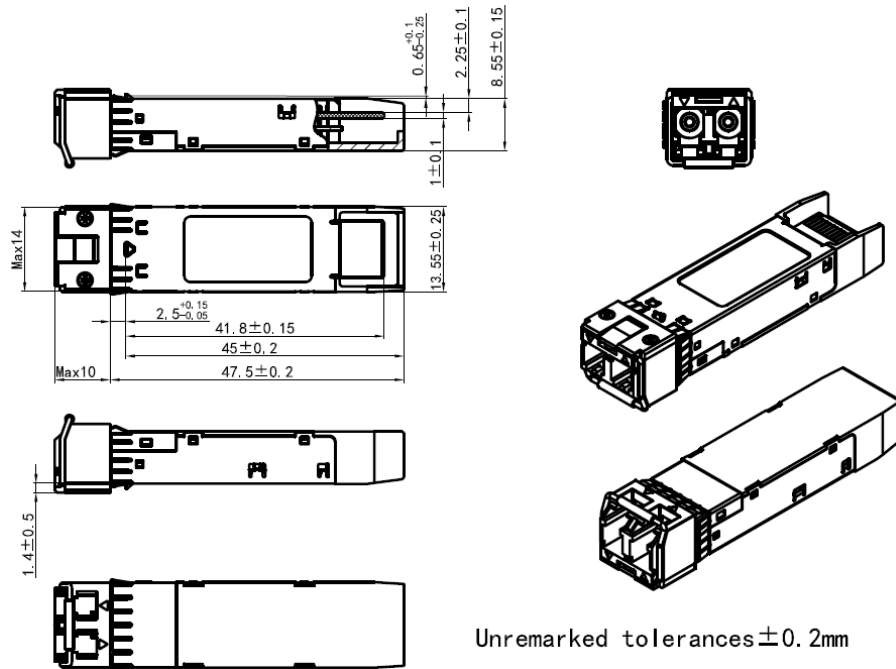
Parameter	Symbol	Min.	Max.	Unit
Center Wavelength	λ	1290	1330	nm
Damage Threshold		-3		dBm
Receive Power Overload			-5	dBm
Receiver Reflectance			-26	dB
Receiver Sensitivity (OMA) ¹	SOMA		-19	dBm
LOS Assert	LOSA	-30		dBm

LOS De-Assert	LOSD		-21	dBm
LOS Hysteresis		0.5		dB

Note1:

Measured at 25.78125Gb/s, ER>4dBm, PRBS 231-1 and BER better than or equal to 5E-5;

6. 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
Arista	SFP-25G-ER-AN-A	Juniper	JNP-SFP-25G-ER-I-A
Brocade	25G-SFP28-ER4-A	MSA	AN-SFP25G-ER-I
Cisco	SFP-25G-ER-I-A	OnePort	OP-SFP25G-ER-I
Mellanox	MMASFP281310-40KM-A	MSA Champion ONE	25GSFP28C-ER-H

7. Contact Information

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