



QSFPDD-PABA17-EDFA-CS

QSFP-DD EDFA Dual Amplifier,
17dBm Gain, Dual CS Connector

Features

- Ultra-compact package with QSFP-DD Type 2A standard.
- Dual CS/UPC optical connector.
- Standard QSFP28 HW interface, Compliant to SFF-8679.
- Bi-Directional integrated dual EDFA.
- Narrow-band amplification in C band without GFF component.
- Ultra-low power consumption.
- Up to 17dBm output power.

Absolute Maximum Ratings

Parameter	Specification	Unit
Operating Case Temperature	0~70	°C
Operation Humidity	5~95	%RH
Storage Temperature	-40~85	°C
Storage Humidity	0~95	%RH

Optic Interface

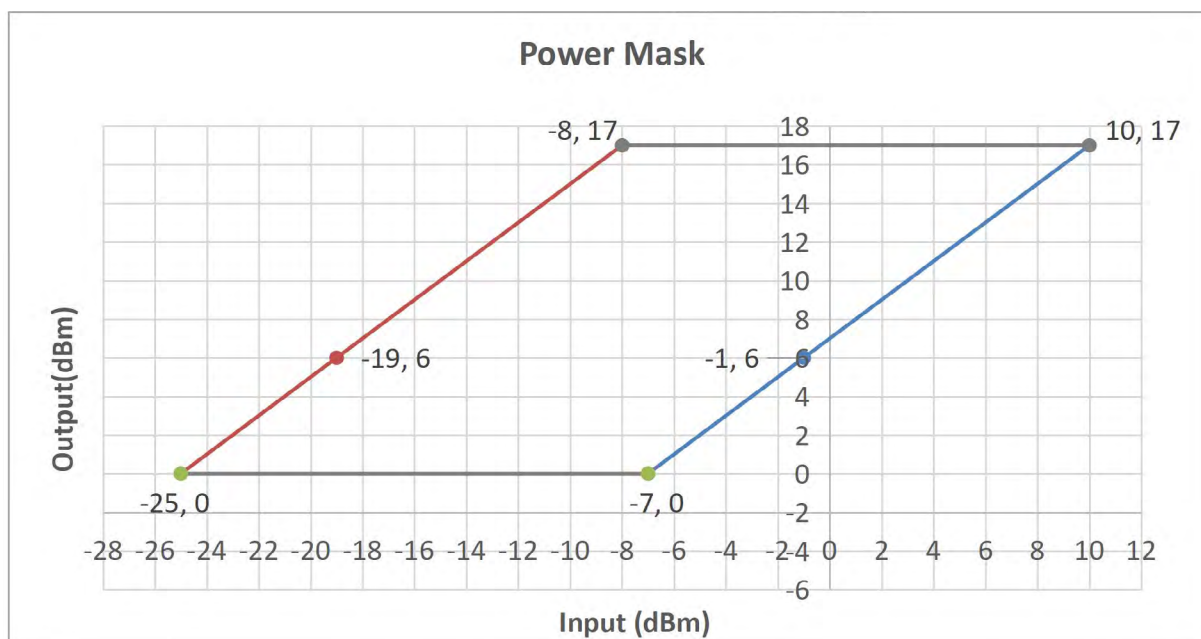
Parameter	Specification
Fiber Type of Pigtail	SM
Connector Type	CS/UPC
Optical Port TX EDFA	COM-R/LINE-T
Optical Port RX EDFA	LINE-R/COM-T

Optical Specifications - TX

Parameter	Condition	Unit	Minimum	Typical	Maximum	Notes
Per-Channel Input Power		dBm	-25		-3	
Total Input Power Range	Standard & Extended Gain Range	dBm	-25		8	See Power Mask
Maximum Total Output Power		dBm			17	

Optical Specifications - TX						
Parameter	Condition	Unit	Minimum	Typical	Maximum	Notes
Signal Output Power Range	Full-channel load				17	See Power Mask
	Single-channel	0				
Gain Range		dB	9		25	
Designed Flat Gain		dB		21		
Noise Figure at Flat Gain	G = 21dB	dB			6	
GF	G = 21dB and full C-Band	dB			5.0	Full C-band 1528.77~1566.72nm
	G = 21dB and 16 Chs	dB			2.0	16 Chs from 1545.3~1557.4nm
Noise Figure at Minimum Gain	G = 9dB	dB			7.5	

Optical Specifications - RX						
Parameter	Condition	Unit	Minimum	Typical	Maximum	Notes
Per-channel Input Power		dBm	-25		-1	
Total Input Power Range		dBm	-25		10	
Maximum Total Output Power	HW limit of the Gain control loop	dBm			17	
Signal Output Power Range	Full-channel load				17	See Power Mask
	Single-channel	0				
Gain Range		dB	7		25	
Designed Flat Gain		dB		23		
GF	G = 23dB and full C-Band	dB			5.0	Full C-band 1528.77~1566.72nm
	G = 23dB and 16 Chs	dB			2.0	16 Chs from 1545.3~1557.4nm
Noise Figure at Flat Gain	G = 20dB	dB			6	
Noise Figure at Minimum Gain	G = 7dB	dB			7.8	

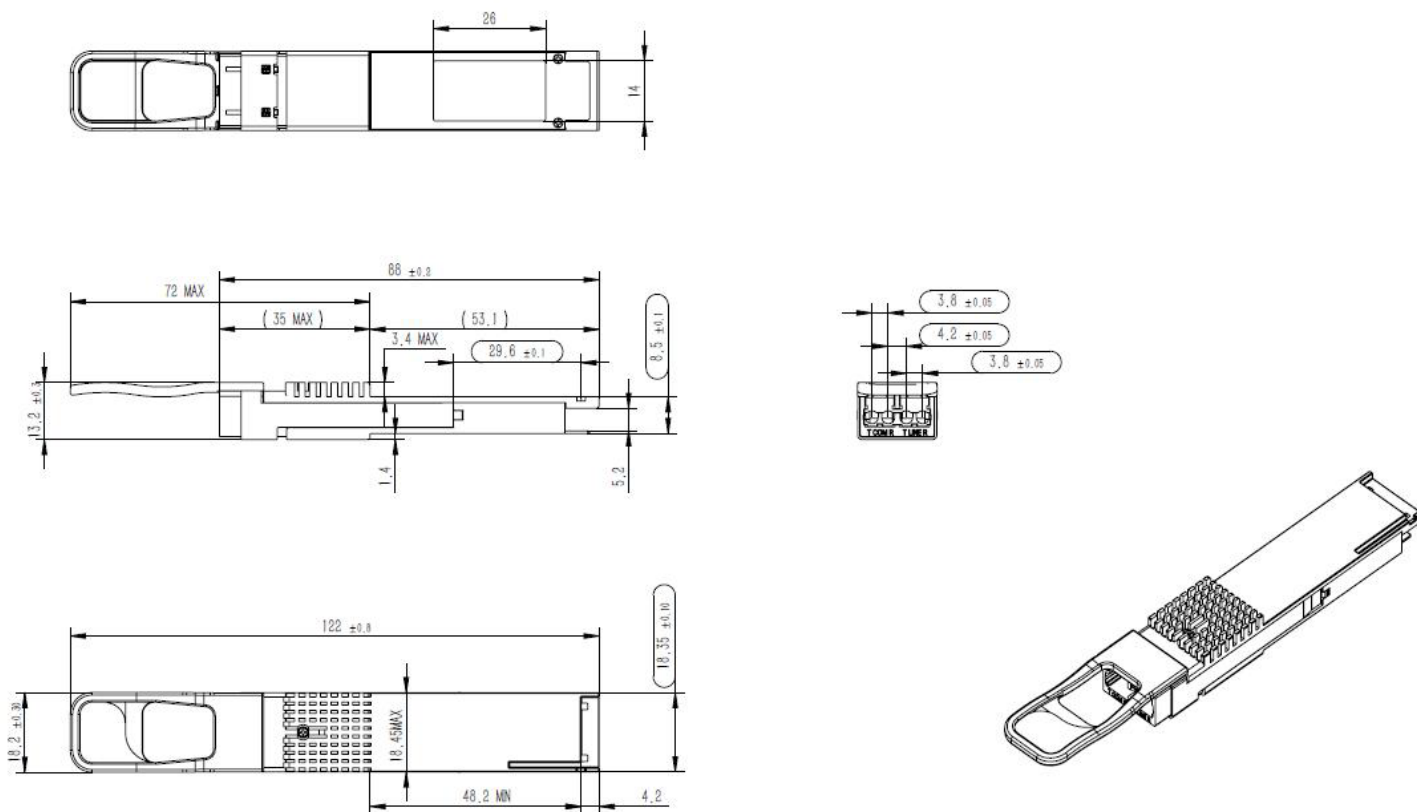


Common Specifications						
Parameter	Condition	Unit	Minimum	Typical	Maximum	Notes
Operating Signal Wavelength Range	Full C-Band	nm	1528.77		1566.72	
	16 Channels	nm	1545.3		1557.4	
Optical Return Loss	All port	dB	40			
Backward ASE Power	TX /RX Input Port	dBm			-20	
Pump Power Leakage	All port	dBm			-30	
Polarization Dependant Gain		dB			0.5	
Polarization Mode Dispersion		ps			0.5	
Gain, Short Term Stability	10 min, in Const. G. mode; Pout > 0 dBm	dB			±0.1	(10ms < sampling time < 20ms)
Output Power, Short Term Stability	10 min, Const. P. mode; Pout > 0dBm	dB			±0.1	(10ms < sampling time < 20ms)

Transient Performances					
Parameter	Condition	Unit	Minimum	Typical	Maximum
Max Over / Undershoot with Input 15dB Add/Drop (Including Static Gain Error)	Input switch time 100us, flat gain setpoint TX 21/RX 23dB	dB			2.0
Max Static Gain Error		dB			0.9
Max Settling Time		us			1500

Electrical Specifications					
Parameter	Unit	Minimum	Typical	Maximum	Notes
Input Power Monitor Accuracy	dB	-0.75		0.75	@-30~+17dBm
Output Power Monitor Accuracy	dB	-0.75		0.75	@-5~+19dBm
Gain Accuracy	dB	-0.75		0.75	
Supply Voltage	V	3.15	3.3	3.45	
Power Consumption - Operative	W		3.5		Steady State
Power Consumption - Worst Case	W			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.

Ordering Information

OEM	Part Number
MSA	AN-QSFPDD-PABA17-EDFA-CS

To learn more visit

approvednetworks.com

ApprovedNetworks.com

800.590.9535 | sales@approvednetworks.com

©2025 Legrand. All rights reserved. The industry-leading brands of Approved Networks, Ortronics, Raritan, Server Technology, and Starline empower Legrand's Data, Power & Control to produce innovative solutions for data centers, building networks, and facility infrastructures. Our division designs, manufactures, and markets world-class products for a more productive and sustainable future. The exceptional reliability of our technologies results from decades of proven performance and a dedication to research and development. V2300