

3.3V MSA EDFA Datasheet

Features

- Input VOA to adjust the input power I2C control interface
- APC/AGC/ACC operation
- LOS function
- Transient control
- Power limiting function to prevent receiver overload
- Two power monitoring points (input/output)
- 1M Laser Safety Specification compliance

Version History

Date	Version	Description
2024/12/27	1.0	Initialize

Order Information

Part Number	Description	Code
WZEDFA-EM-B-1520-R5	-	-
WZEDFA-EM-B-2020-R5		
WZEDFA-EM-B-2520-R5		

Operation/Storage Temperature and Humidity

Parameter	Specification	Unit	Note
Operating case temperature	-5 ~ 55	°C	
Operation Humidity	5~85	%RH	
Storage Temperature	-40 ~ +85	°C	
Storage Humidity	5~95	%RH	

Optical Characteristics

WZEDFA-EM-B-1520-R5

Parameter	Min	Typical	Max	Unit	Note
Input power range	-15	5	10	dBm	
Output Power(Signal) range	0	20	20	dBm	
Gain Range	9	15	15	dB	Without VOA
Settable tilt		0			
Gain accuracy	-0.5		0.5	dB	
Gain flatness		1.0	1.5	dB	@5G15, 25°C
Noise Figure			5.5	dB	@5G15, 25°C
PDG			0.5	dB	
PMD			0.5	Ps	

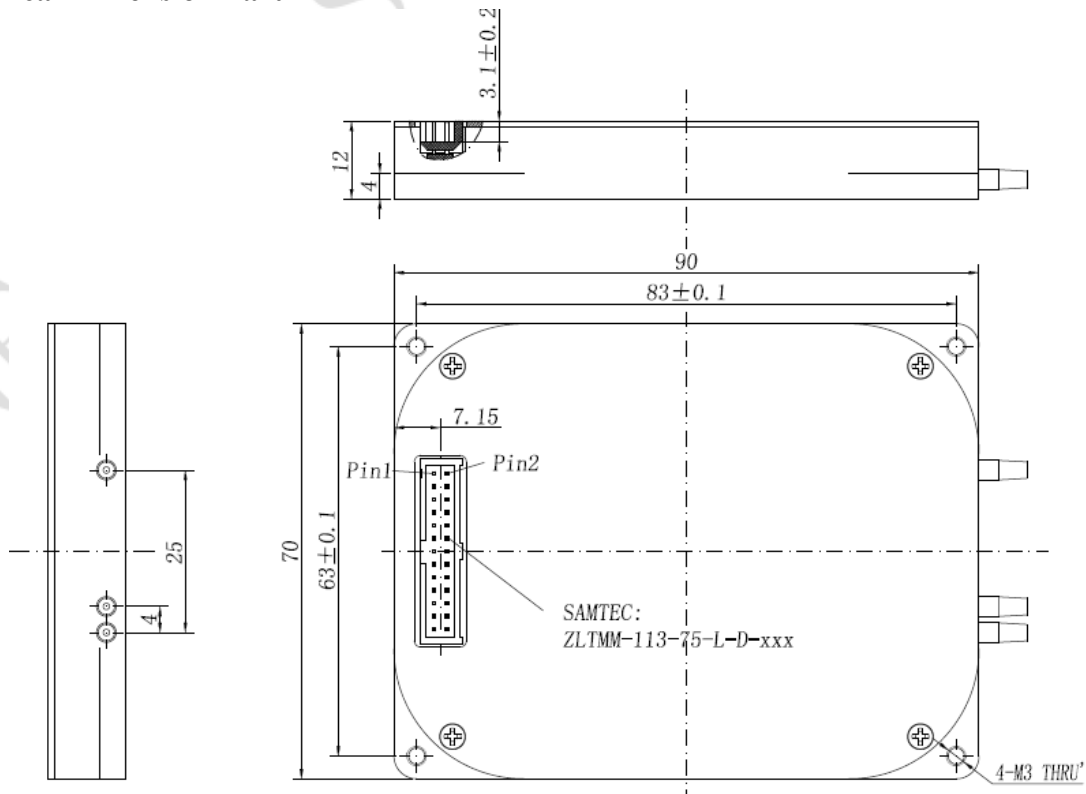
WZEDFA-EM-B-2020-R5

Parameter	Min	Typical	Max	Unit	Note
Input power range	-15	5	10	dBm	
Output Power(Signal) range	0	20	20	dBm	
Gain Range	14	20	20	dB	Without VOA
Settable tilt		0			
Gain accuracy	-0.5		0.5	dB	
Gain flatness		1.0	1.5	dB	@0G20, 25°C
Noise Figure			5.5	dB	@0G20, 25°C
PDG			0.5	dB	
PMD			0.5	Ps	

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Parameter	Min	Typical	Max	Unit	Note
Input power range	-35	-5	-5	dBm	
Output Power(Signal) range	-2	20	20	dBm	
Gain Range	19	25	25	dB	Without VOA
Settable tilt		0			
Gain accuracy	-0.5		0.5	dB	
Gain flatness		1.0	1.5	dB	@-5G25, 25°C
Noise Figure			5.5	dB	@-5G25, 25°C
PDG			0.5	dB	
PMD			0.5	Ps	

Mechanical Dimension Part



Electrical requirement

Pin Functionality

Pin number	Name	Property	Level type
1	VCC_3.3V	Power	
2	VCC_3.3V	Power	
3	GND	Power	
4	GND	Power	
5	NC	Function	
6	NC	Function	
7	NC	Function	
8	NC	Function	
9	Output_Alarm	Output	LVTTL
10	Input_ Alarm	Output	LVTTL
11	PumpTem_ Alarm	Output	LVTTL
12	Pump_ CurrentAlarm	Output	LVTTL
13	NC	Function	
14	Module Tem_ Alarm	Output	LVTTL
15	NC	Function	
16	NC	Function	
17	NC	Function	
18	Reset	Input	
19	GND	Power	
20	GND	Power	
21	RXD	Input	LVTTL
22	TXD	Output	LVTTL
23	GND	Power	
24	GND	Power	
25	VCC_3.3V	Power	
26	VCC_3.3V	Power	

Power Supply Characteristics and Operating Rating

Supply	Min	Typ	Max	Unit
Digital Supply Voltage	+3.14	+3.3	+3.47	V
Power Dissipation	-	3.3	8	W