

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# **FINISAR**

#### **Key Features**

- ► Low power consumption
- ► Compact form factor
- ▶ Up to 22 dBm output power
- ► Flat gain
- Low noise figure
- Fast transient suppression
- Can support G.657 low bend radius fiber connectors
- Software-configurable as preamplifier or booster in same part number
- RS232 and I2C communication, full set of control options and alarms
- Qualified to Bellcore GR1312 and GR1089
- Class 1M\* laser product classification

#### **Applications**

- Metro and regional DWDM networks
- ► Sonet/SDH and Datacom networks
- ► Free space optics communications
- Military and industrial applications
- ► Test and measurement systems
- Video surveillance systems
- ► LIDAR
- Microwave optics

## Fixed Gain EDFA

#### Overview

Finisar's 70x90 mm Fixed Gain (FG) EDFA product line supports a full range of C- or L-band fixed gain WDM EDFAs, as well as narrow band, CWDM and single channel EDFAs. The products support either cooled or uncooled pumps, thus allowing the optimal combination of size, power consumption and performance to be achieved for each application.

The platform incorporates advanced control and monitoring functions, and provides fast transient suppression for stable gain in all operating conditions. The FG EDFA can be software-configured as a pre-amplifier, booster or inline amplifier, thus allowing a single part-number to address different network functions.

These products are available in a wide variety of gain configurations targeting different output powers. In addition, they can be configured with a VOA (Variable Optical Attenuator) to more precisely maintain optical output power.



### **Specifications**

Parameter		P/N	FOA-M1100MB- ESC1C-AA001		FOA-M1500CB- ESC1C-AA011		F0A-M2200CB- EFG1C-AA002		FOA-M2200CB- EFG1C-AA003		FOA-M2200CB- EFG1C-AA004		FOA-M2200CB- EFG1C-AA005		FOA-M2200CB- EFG1C-AA006		FOA-M2200CB- EFG1C-AA007		FOA-M2200CB- EFG1C-AA008		FOA-M2300CD- EFV1C-AA009		
		Unit	Specification		Speci	Specification		Specification		Specification		Specification		Specification									
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max											
Form Factor		mm	70x45x12		90x70x15		90x70x15		90x70x15		90x70x15		90x70x15										
Amplifier Type		-	Single Channel		OSC EDFA		WDM FGA		WDM FGA		WDM FGA		WDM FGA		WDM FGA		WDM FGA		WDM FGA		WDM FGA + Output VOA		
Operating Wavelength Range		nm	1528.77	1567.13	1504.5	1517.5	1529	1563	1528.77	1564	1528.77	1565	1529	1563	1528.77	1565	1528.77	1565	1529	1563	1529.5	1563	
Input Power Range	Booster mode	dBm	m -10	5	-2	7	-27	2	-25	8	-35	-5	-24	5	-25	-25 10	-25	10	-25	8	-18	2	
	Pre-amp mode	ubili	-10				-35	-3	-40	-5			-32	0	-35	0	-40	-5					
Output Power Range	Booster mode	dBm	5	16	13		-7	17	-7	17.4	-7 17	17	-5	20	5 21	-5	21	-5	20.8	-15	19		
	Pre-amp mode	UDIII	,	10			-10	13	-7	17.4		17	-10	13		21	-5	21	J	20.0	IJ		
Saturated Output Power		dBm	16		13		17			17.4	17		20		20		20		21		19		
Settable Gain Range	Booster mode	dB	- 5	26	N/A	N/A	10	20	4	28	15 30	30	10	20	15	25	10	26	10	20	0	20	
	Pre-amp mode	dB					13	25	13	33		50	13	25	15	30	15	33	10		VOA, not o	VOA, not gain range	
Optimal Flat Gain		dB	N/A		N/A		15		23		23		15		22		26		20		22		
Gain/Power Setting Accuracy	Booster mode	dB	-0.5	0.5	-0.5	1	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.5	0.5	-0.5	-0.5 0.5	-0.5	0.5	-0.5	0.5	-0.5	0.5	
	Pre-amp mode	dB					-0.5	0.5	-0.5	0.5			-0.5	0.5	-0.5 0.5	-0.5	0.5	-0.5	0.5	0.5	0.5		
Gain Flatness vs. Wavelength		dB	N,	'A	N/.	A		±0.6		±0.6		±0.5		±0.6		±0.6		±0.6		±0.6		1.5pk-pk	
Dynamic gain tilt		dB/dB	N,	'A	N/.	A		±0.06		0.9		0.9		0.9		0.9		0.9		0.9		N/A	
Gain / Power Stability		dB	-0.2	0.2	-0.1	0.1		±0.1		±0.1		±0.1		±0.1		±0.1		±0.1		±0.1		±0.1	
Noise Figure (at OFG or equivalent)		dB		6.5		8		6		5.5		5.5		6		5.5		5.5		5.5		5.5	
Return loss		dB	40		40		40		40		40		40		40		40		40		40		
PDG		dB		0.5		0.3		0.5		0.4		0.3		0.5		0.4		0.4		0.5		0.5	
PMD		ps		0.3		0.15		0.3		0.2		0.3		0.3		0.2		0.2		0.3		0.3	
Multi-Path Interference		dB		-40		-40		-40		-40		-40		-40		-40		-40		-40		-40	
Laser Safety Classification		-	Class 1M		Class 1M		Class 1M		Class 1M		Class 1M												
Optical Connectors		-	2: In, Out		2: In, Out		2: In, Out		3: In, Out, Out Mon		3: In, Out, Out Mon		2: In, Out		3: In, Out, Out Mon		3: In, Out, Out Mon		3: In, Out, Out Mon		3: In, Out, Out Mon		
Operating Modes		-	APC, Manual		APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		AGC, APC, Manual		
Power Supply Voltage		٧	2.97	3.63	3.13	3.46	4.75	5.25	4.75	5.25	4.75	5.25	4.75	5.25	4.75	5.25	4.75	5.25	3.15	3.45	4.75	5.25	
Power Consumption		W		2.5		9.5		8		8		8		11		11		8		12		8	
Operating Case Temperature		°C	0	70	0	70	0	70	0	70	0	70	0	70	0	70	0	70	0	70	0	70	
Communications Protocol		-	RS-232		RS-232		RS-232		RS-232		RS-232 LVTTL		RS	RS-232		RS-232 LVTTL		RS-232 LVTTL		RS-232		RE-232 LVTTL	
Default Baud Rate		Baud	9600		19200		19200		9600		19200		19200		19200		19200		19200		57600		
Eval Board P/N		-	1178	1178581		1185403		1185403		1185403		1185403		1185403		1185403		1185403		1185403		1185403	
Eval Board Cable P/N		-	18-10-0006R		18-10-0006R		18-10-0006R		18-10-0006R		18-10-0006R												

Standard, available part number currently in production are listed above. Custom specifications can be considered to meet customers' needs.







Visit Our Website