

EATV5100-FM02 (70×90×15mm)

MSA Compact CATV EDFA Module (Full function)

PRODUCT DESCRIPTION

EATV5100 series is a low noise, high performance, high cost-effective EDFA module, which is specially designed for CATV system.

GM is Gain Block Module, without electronic control circuit.

FM is Full function Module which is with electronic control circuit. EATV5100-FM02 is a full function module, using 70×90×15mm MSA Compact package, with single channel and narrow bandwidth standard version. A standard 6-pin electric connector provides simple electrical connection. The module adopts a high performance cooling pump laser, the output optical power up to



Guangtai is a famous manufacture of EDFA. Products with high-performance, high reliability and excellent cost performance, as well as our good service make it to be an ideal choice for OEM system integrators.

PRODUCT FEATURES

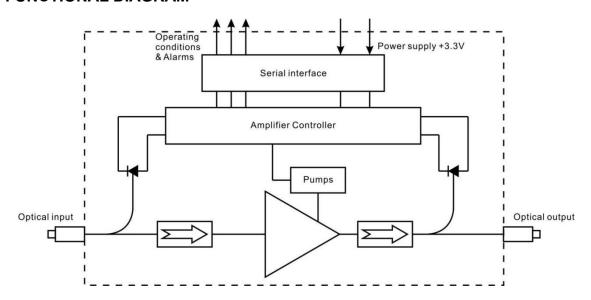
- ▶ With Digital Control Electronics (Full Function)
- ► MSA compact package (70×90×15mm)
- ▶ RS-232 standard communication interface
- ▶ The output optical power up to 24dBm
- ▶ Excellent optical performance
- ▶ Low noise figure, suitable for all kinds of CATV application
- ► Low consumption
- ▶ Wide range of working temperature
- ▶ Excellent cost performance

MAIN APPLICATION

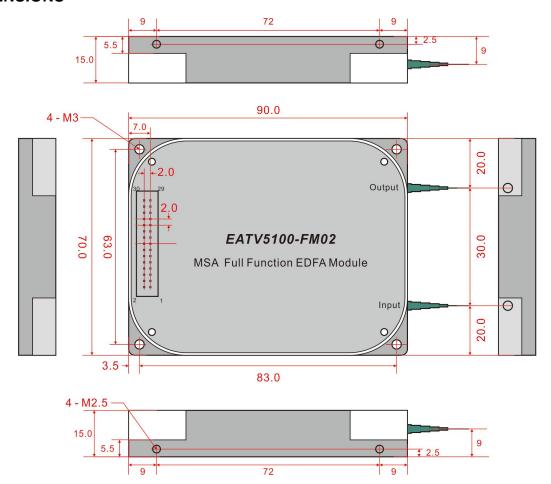
- ► CATV
- ▶FTTx PON
- ▶ Other single channel optical communication system



FUNCTIONAL DIAGRAM



DIMENSIONS





TECHNICAL INDEX

Performance			Min.	Тур.	Max.	Supplement
Optical feature	Operating wavelength range	(nm)	1528		1564	
	Typical applications	(nm)	1540		1564	
	Input optical power (pin)	(dBm)	-10		+10	
	Total output power @ Pin=0dBm	(dBm)	13		24	
	Noise figure	(dB)		4.0	5.0	
	Polarization dependent loss (PDL)	(dB)			0.3	
	Polarization dependent gain (PDG)	(dB)			0.3	
	Polarization mode dispersion (PMD)	(ps)			0.3	
	Pump power leakage	(dB)			-30	
	Output & input isolation	(dB)	30			
	Return loss	(dB)	45			UPC
			55			APC
	Fiber type		SMF-28, 900µm loose tube			
	Connector type		LC, SC, FC			
	Connector polish		UPC, APC			
	Communication interface		RS232			
General feature	Power Supply Voltage	(V)	3.1	3.3	3.5	
	Power Consumption	(W) -		1.0	2.0	Uncooled
				2.0	10.0	Cooled
	Operating temp.	(℃)	-5		70	
	Storage temp.	(℃)	-40		+85	
	Relative humidity	(%)	+5		+85	
	Size (W)×(D)×(H)	(mm)	70×90×15			

Note: 1. Power supply voltage optional DC+5V



GAIN BLOCK PIN ASSIGNMENT

Pin	Definition	Pin	Definition
1	+3.3V	2	+3.3V
3	NC	4	NC
5	GND	6	GND
7	Upper computer receive	8	Upper computer transmit
9	GND	10	GND
11	NC	12	NC
13	Amplifier switch (enable) input, (low level enable)	14	NC
15	NC	16	NC
17	NC	18	NC
19	NC	20	NC
21	GND	22	GND
23	NC	24	NC
25	GND	26	GND
27	NC	28	NC
29	+3.3V	30	+3.3V

Note: 30-Pin type: HIROSE DF11-30DP-2DSA



PRODUCT SERIES

Model	Input optical power (dB)	Output power (dBm) (Pin=0dBm)	Noise figure (dB)
EATV5113-FM02	-10~+10	13	<4.0
EATV5114-FM02	-10~+10	14	<4.0
EATV5115-FM02	-10~+10	15	<4.0
EATV5116-FM02	-10~+10	16	<4.0
EATV5117-FM02	-10~+10	17	<4.0
EATV5118-FM02	-10~+10	18	<4.0
EATV5119-FM02	-10~+10	19	<4.5
EATV5120-FM02	-10~+10	20	<4.5
EATV5121-FM02	-10~+10	21	<4.5
EATV5122-FM02	-10~+10	22	<5.0
EATV5123-FM02	-10~+10	23	<5.0
EATV5124-FM02	-10~+10	24	<5.0

MODEL EXPLANATION

