EATV5100-FM01 Series

Small Form Factor (40×70×12mm)

CATV EDFA Module (Fun function)

Technical Specification

CONTENT

1.0   PRODUCT DESCRIPTION

Huatai 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-FM01 is a full function module, using $40\times70\times12$mm mini 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 uncooled pump laser, the output optical power up to 19dBm.

Huatai 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.
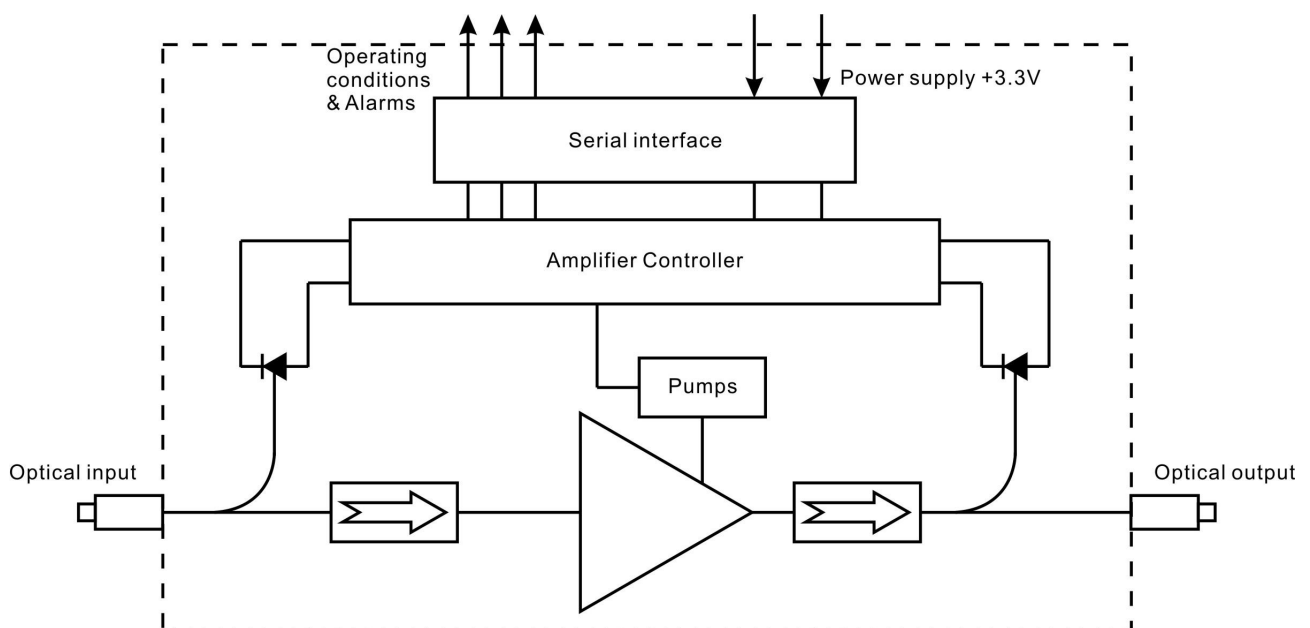
2.0 PRODUCT FEATURE

- With Digital Control Electronics (Full Function)

- Small form factor package (40×70×12mm)

- RS-232 standard communication interface

- The output optical power up to 19dBm

- Excellent optical performance

- Low noise figure, suitable for all kinds of CATV application

- Low consumption

- Wide range of working temperature

- Excellent cost performance

3.0 MAIN APPLICATION

- CATV

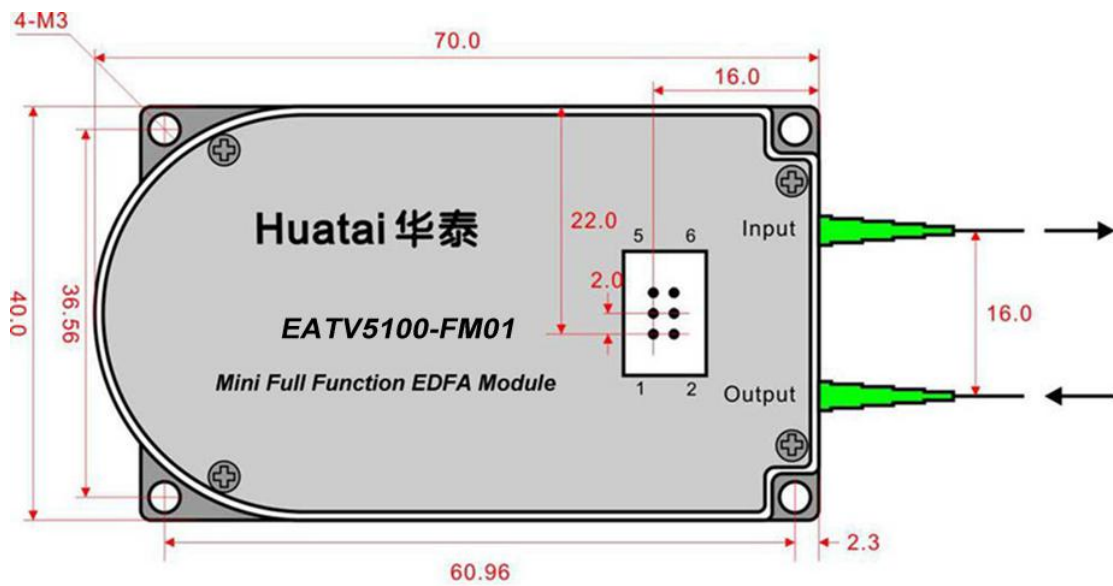- FTTx PON

- Other single channel optical communication system

4.0 Functional diagram

5.0 Dimensions

Unit:mm

6.0 Electrical 6-Pin Assignments

Pin	Definition	Pin	Definition
1	RS-232 serial input	4	Alarm status
2	GND	5	GND
3	RS-232 serial output	6	Power supply +3.3V

Note: 6-Pin type: HIROSE DF11-6DP-2DSA

7.0　Technique index

Performance			Min.	Typ.	Max.	
Optic feature	Operating wavelength range	(nm)	1528		1564	
	Typical applications	(nm)	1540		1564	
	Input optical power (Pin)	(dBm)	-10		+10	
	Output power @ Pin=0dBm	(dBm)	10		19	Pin=0dBm
	Noise figure	(dB)		4.0	5.0	
	Polarization dependent gain	(dB)			0.3	
	Polarization mode dispersion	(ps)			0.3	
	Polarization dependent loss	(dB)			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			
General feature	Communication interface		RS232			
	Power supply voltage	(V)	3.1	3.3	3.5	
	Power consumption	(W)		1.0		
	Operating temp.	(°C)	-5		70	
	Store temp.	(°C)	-40		+85	
	Relative humidity	(%RH)	+5		+95	
	Size(W) × (L) × (H)	(mm)	40× 70 × 12			

8.0 PRODUCT SERIES

Module	Output power(dBm) (Pin=0dBm)	Input power monitor	Output power monitor	Number of Pin
EATV5110-FM01-P06	≥10	NC	With	6
EATV5112-FM01-P06	≥12	NC	With	6
EATV5113-FM01-P06	≥13	NC	With	6
EATV5114-FM01-P06	≥14	NC	With	6
EATV5115-FM01-P06	≥15	NC	With	6
EATV5116-FM01-P06	≥16	NC	With	6
EATV5117-FM01-P06	≥17	NC	With	6
EATV5118-FM01-P06	≥18	NC	With	6
EATV5119-FM01-P06	≥19	NC	With	6

9.0 ORDER INFORMATION

EATV 5 1 ☐☐ – FM 01 / ☐☐ – ☐☐

Product series	Optical bandwidth		Product Type		Output power		Module Type		Exterior		Connector		Fiber length	
CATV EDFA Module	5	1540~1563nm CATV	1	BA	10	10dBm	FM	Full function module	01	40×70×12	LA	LC/APC	05	0.5M
					12	12dBm			02	70×90×15	LP	LC/UPC	08	0.8M
					13	13dBm	GM	Gain block module	05	125×150×22	SA	SC/APC	10	1.0M
					14	14dBm					SP	SC/UPC		
					15	15dBm					FA	FC/APC		
					16	16dBm					FP	FC/UPC		
					17	17dBm								
					18	18dBm								
					19	19dBm								