



ErFA21003

Compact booster amplifier with cooled pump (980nm pumped version)

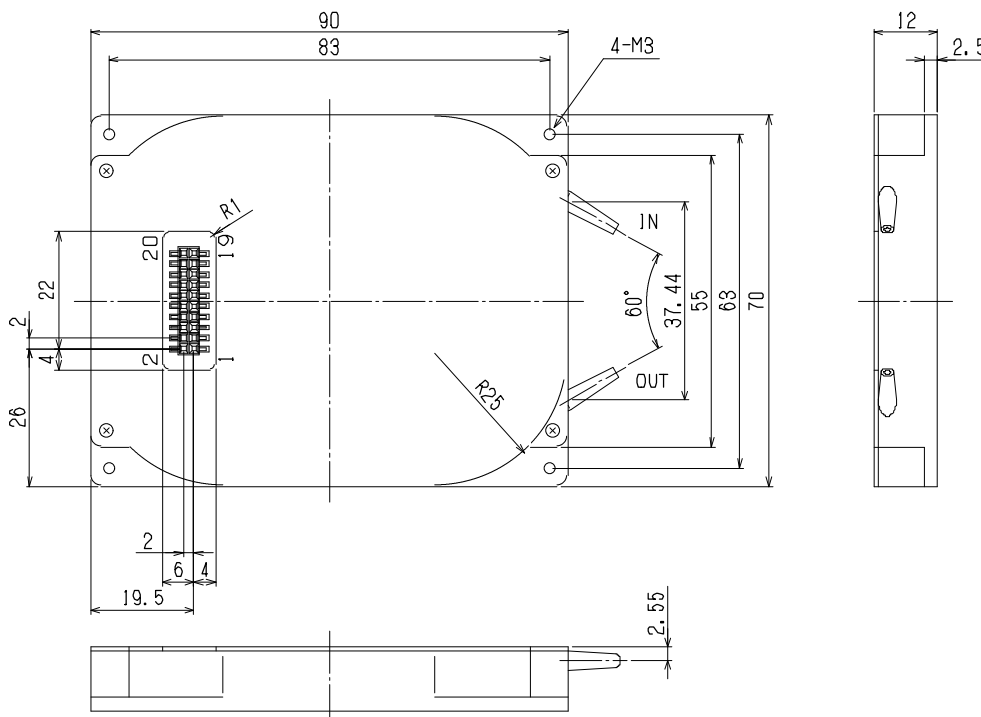
Description

- ErFA21003 is designed for a wide variety of single channel or small number of channel applications.
- Compact size (90mm x 70mm x 12mm)

Features

- High saturated output power (more than +15 dBm)
- Low noise figure (less than 6.0 dB)
- Input monitor and/or output monitor are available.

Outline drawing



Heat sink is available if necessary.

FURUKAWA ELECTRIC



Environmental conditions

Items	Symbol	Specification		Unit	Comments
		min.	max.		
Operating temperature	Top	-5	60	deg.C	
Operating Humidity	RHop		80	%RH	
Storage temperature	Tstg	-40	85	deg.C	
Storage Humidity	RHstg		90	%RH	

Optical characteristics

Items	Symbol	Specification		Unit	Comments
		min.	max.		
Wavelength range	λ	1530	1562	nm	
Input power	Pin	-10		dBm	
Output power	Pout	15		dBm	
Noise figure	NF		6	dB	Pin=-10dBm
Polarization dependence of output power	PDG		0.3	dB	
Polarization mode dispersion	PMD		0.5	ps	
Operating laser forward current	If,BOL		300	mA	
Operating laser forward voltage	Vf,BOL		2.8	V	
Input monitor responsivity	Rin	10	30	mA/W	
Polarization sensitivity of input monitor	PDRin		0.3	dB	
Output monitor responsivity	Rout	10	30	mA/W	
Polarization sensitivity of output monitor	PDRout		0.3	dB	
Optical return loss	ORL	40		dB	Input and output port

Electrical pin configuration

PIN No.	Description	PIN No.	Description
1	Case ground of monitor PD and pump laser	11	Cooler anode
2	Input monitor cathode	12	Cooler anode
3	Input monitor anode	13	Cooler anode
4	Output monitor cathode	14	Cooler cathode
5	Output monitor anode	15	Cooler cathode
6	Thermistor	16	Cooler cathode
7	Pump laser anode	17	Case ground of monitor PD and pump laser
8	Pump laser anode	18	Thermistor
9	Pump laser monitor cathode	19	Pump laser cathode
10	Pump laser monitor anode	20	Pump laser cathode

• The electrical connector is a male 20pin. The spacing is 2mm. The shape is 0.5mm square.



Ordering information

ErFA21003 - X - YY

Fiber for optical interfaces

S SMF
D DSF

Optical connector

FS FC super PC
SS SC super PC
SA SC angled PC
LS LC super PC
LA LC angled PC

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