

Compact amplifier with uncooled pump (980nm pumped version)



Applications

- Long haul and Metro networks
- Single-channel or small number of channel networks
- C-band

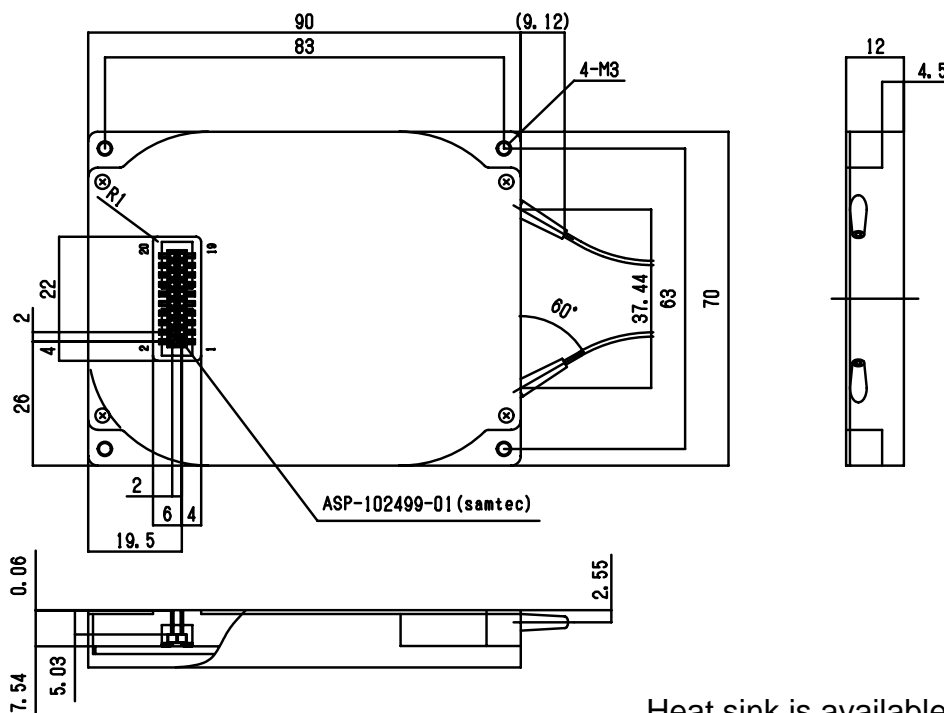
Descriptions

- ErFA20000 series is designed for a wide variety of single channel or small number of channel applications.
- Compact size (90mm x 70mm x 12mm)

Features

- Low noise figure
- Input monitor and/or output monitor are available
- Low power consumption owing to the uncooled pumping

Outline drawing



Heat sink is available if necessary.

Environmental conditions

Items	Symbol	Specification
Operating temperature	Top	0 – 60 deg.C
Operating humidity	RHop	<85 %RH (*1)
Storage temperature	Tstg	-40 – 85 deg.C
Storage humidity	RHstg	<85 %RH (*1)

*1: No dew condensation

Specifications

Items	Symbol	ErFA20001	ErFA20002
Wavelength range	λ	1530 - 1565 nm	
Input power	Pin	-10 - +5dBm	-30 - -10dBm
Output power	Pout	>+12dBm	>-5dBm
Noise figure	NF	<5.7dB(*2)	<6.5dB(*3)
		<8.7dB(*4)	<8.2dB(*5)
Polarization dependence of output power	PDG	<0.3dB	
Polarization mode dispersion	PMD	<0.5dB	
Operating laser forward current	If,BOL	<300mA	
Operating laser forward voltage	Vf,BOL	<2.5V	
Input monitor responsivity	Rin	10 - 30 mA/W	30 - 80 mA/W
Polarization sensitivity of input monitor	PDRin	<0.3dB	
Output monitor responsivity	Rout	10 - 30 mA/W	20 - 50 mA/W
Polarization sensitivity of output monitor	PDRout	<0.3dB	
Optical return loss	ORL	<40dB	

*2: Pin=-10dBm Typ.6.0dB

*3: Pin=-30dBm Typ.6.0dB

*4: Pin=+5dBm Typ.8.2dB

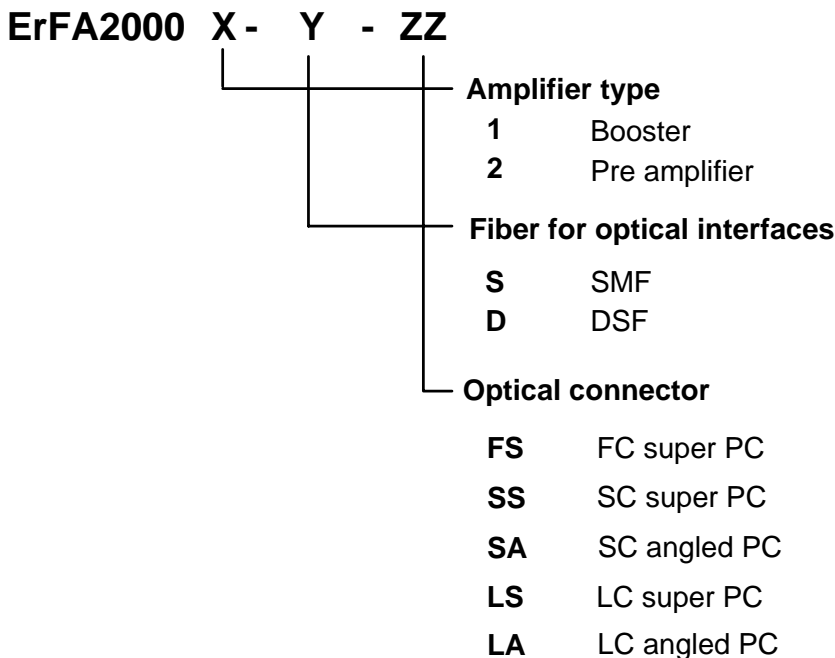
*5: Pin=-10dBm Typ.7.7dB

Electrical pin configuration

PIN No.	Description	PIN No.	Description
1	Case ground of monitor PD	11	NC
2	Input monitor cathode	12	NC
3	Input monitor anode	13	NC
4	Output monitor cathode	14	NC
5	Output monitor anode	15	NC
6	Thermistor (option)	16	NC
7	Pump laser anode	17	Case ground of pump laser
8	Pump laser anode	18	Thermistor (option)
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



Safety information



Furukawa Electric reserves the right to improve, enhance and modify the features and specifications of FITEL products without prior notifications.



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