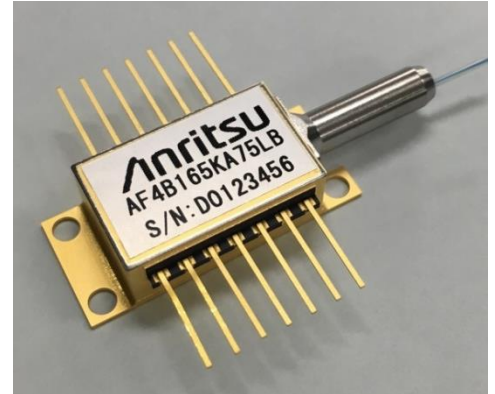


1.48 μ m LD Module *AF4B Series type E*

AF4B SERIES type E is 1.48 μ m high power laser diode modules designed for Er doped fiber amplifier. The laser is packaged in a 14pin butterfly package with optical isolator, monitor photodiode and thermos-electric cooler (TEC).

FEATURES

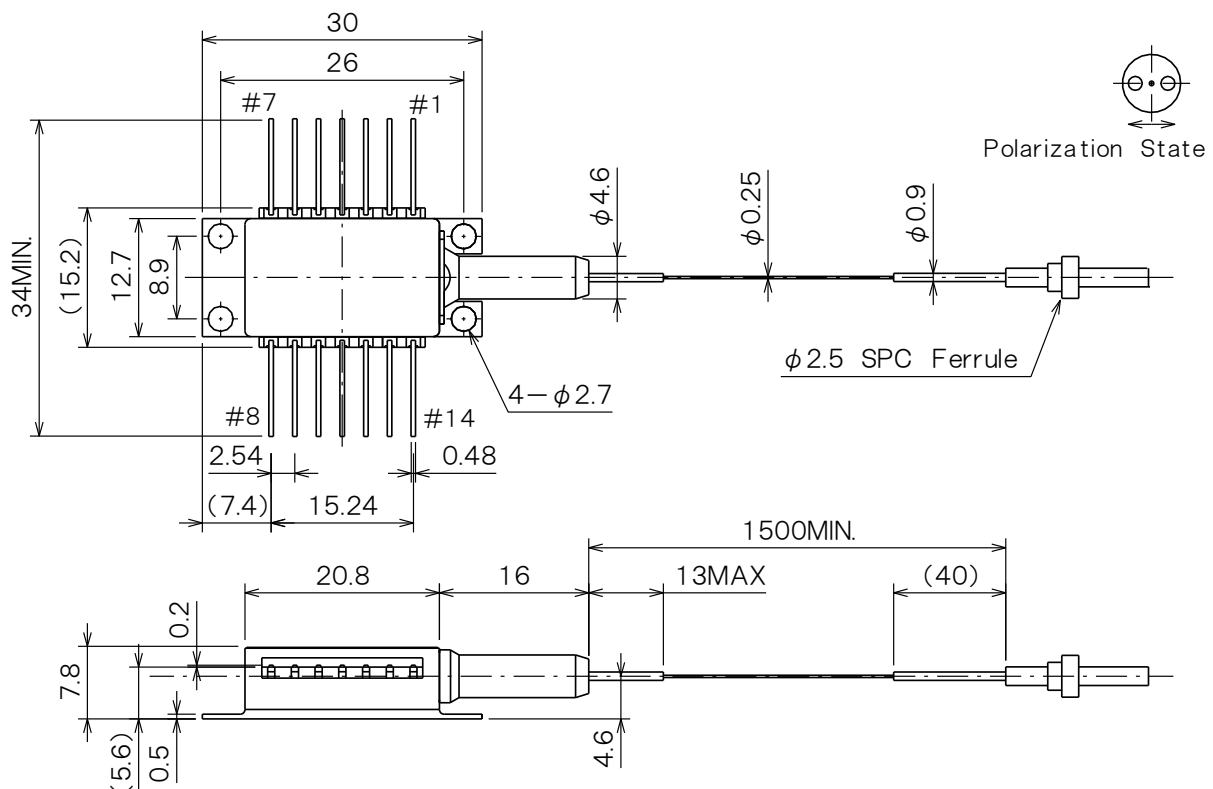
- Optical Output: AF4B155KA / KD75LB: 550 mW
AF4B160KA / KD75LB: 600 mW
AF4B165KA / KD75LB: 650 mW
- Fiber (UV coating fiber: Φ 0.25 mm)
- 14 pin butterfly Package
- Built-in optical Isolator, Monitor photodiode and Thermoelectric cooler
- LD operating temperature: 35°C



APPLICATION

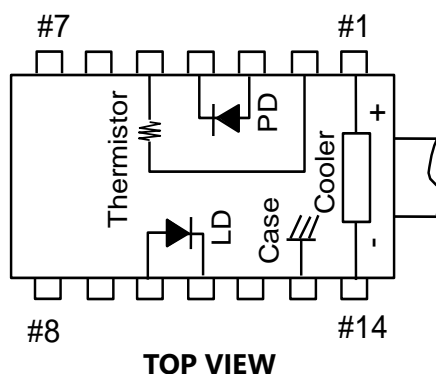
- Er doped Fiber Amplifier
- Optical power supply

DIMENSIONS (unit: mm)



PIN CONFIGURATION

No.	FUNCTION	No.	FUNCTION
1	Cooler anode	8	NC
2	Thermistor	9	NC
3	PD anode	10	LD anode
4	PD cathode	11	LD cathode
5	Thermistor	12	NC
6	NC	13	Case
7	NC	14	Cooler cathode



TOP VIEW

ABSOLUTE MAXIMUM RATINGS / PIN CONFIGURATION

Item	Symbol	Ratings	Unit
LD Forward Current	I_F	2800	mA
LD Reverse Voltage	V_R	2	V
PD Forward Current	I_{FD}	10	mA
PD Reverse Voltage	V_{RD}	20	V
Operating Case temperature	T_C	-5 to +70	°C
Storage Temperature	T_{stg}	-40 to +85	°C
Cooler Current	I_C	5.8	A

*EXCESS OVER THE ABSOLUTE MAXIMUM RATINGS MAY CAUSE DEVICE FAILURE.

OPTICAL AND ELECTRICAL CHARACTERISTICS ($T_{LD}=35^{\circ}\text{C}$, $T_C=25^{\circ}\text{C}$)

Item	Symbol	Test condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	-	-	-	250	mA
Center Wavelength	λ_c	at Rated Power, RMS (-20dB)	1460	1475	1490	nm
Spectral width	$\Delta\lambda$	at Rated Power, -20dB	-	5	10	nm
Monitor Current	I_m	at Rated Power	300	-	3000	μA
PD Dark Current	I_d	$V_{RD}=5\text{V}$	-	-	0.1	μA
Tracking Error	ΔP_f	$I_m=\text{const.}$, $T_C = -5$ to 70°C	-	-	0.5	dB
Isolation	R_O	$T_{LD}=35^{\circ}\text{C}$	-	30	-	dB
Extinction Ratio *	X_p	at Rated Power	17	-	-	dB
Thermistor Resistance	R_{th}	$T_{LD}=35^{\circ}\text{C}$	-	6.5	-	k Ω
		$T_{LD}=25^{\circ}\text{C}$	-	10.0	-	

Note) * : This specification is only specified for PMF model.

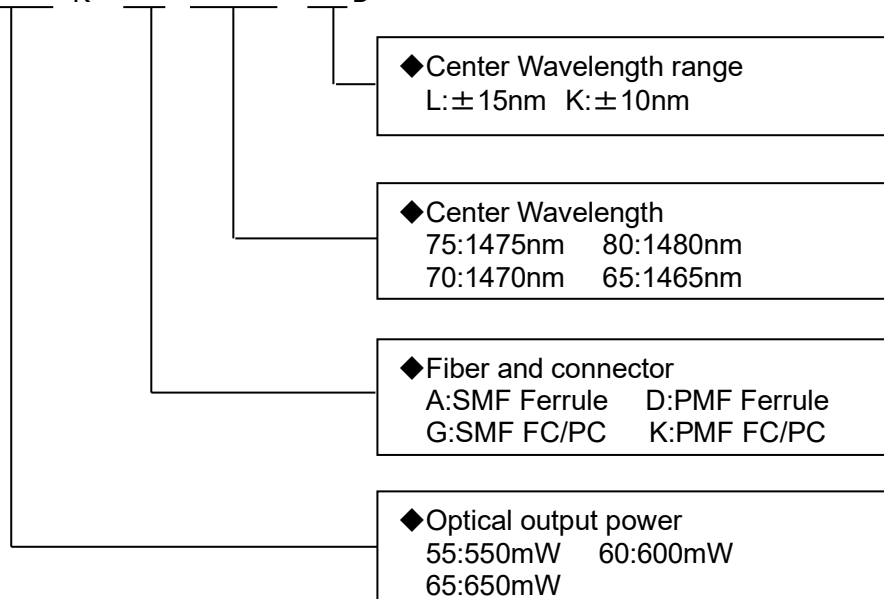
OPTICAL OUTPUT POWER / COOLER / POWER CONSUMPTION

Item	Symbol	Test condition	Output Power			Unit
			550mW	600mW	650mW	
Forward Current	I_F	at Rated Power, BOL	1980	2170	2440	mA
Forward Voltage	V_F	at Rated Power, BOL	2.0	2.05	2.15	V
		at Rated Power, EOL*	2.24	2.3	2.41	V
Cooler Current	I_C	$T_C=70^{\circ}\text{C}$, EOL*	2.3	2.6	2.9	A
Cooler Voltage	V_C	$T_C=70^{\circ}\text{C}$, EOL*	2.85	3.15	3.45	V

Note) * : EOL(End of life)=BOL (Begin of life) \times 1.12

ORDERING INFORMATION

MODEL : A F 4 B 1 # # K # # # # B



CAUTION : Handle the fiber of the enclosed device(s) with extreme care ; glass fiber is subject to breakage if mishandled and permanent damage to the device may result. Do not pull the device by the fiber or protective sleeve.
Do not coil the fiber into a loop of than 30 mm in radius.

SEMICONDUCTOR LASER

DANGER

INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION

AVOID EXPOSURE
Invisible laser radiation is emitted from this aperture

OUTPUT POWER 800mW
WAVELENGTH 0.80 to 1.80 μm
CLASS IV LASER PRODUCT

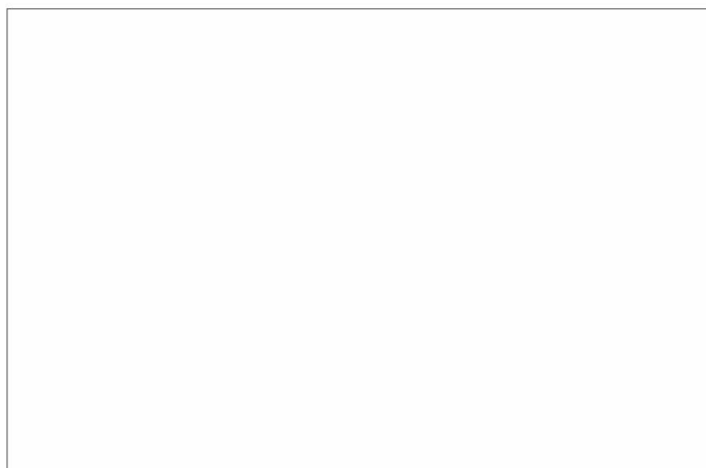
Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
This Product Complies with 21 CFR 1040.10 and 1040.11
Manufactured Anritsu Corp. 5-1-1 Onna, Atsugi-shi, Kanagawa, Japan

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SENSING & DEVICES COMPANY
OVERSEAS SALES DEPT**

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URL: <https://www.anritsu.com/sensing-devices>

Please contact following local office for the quotation and order.
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