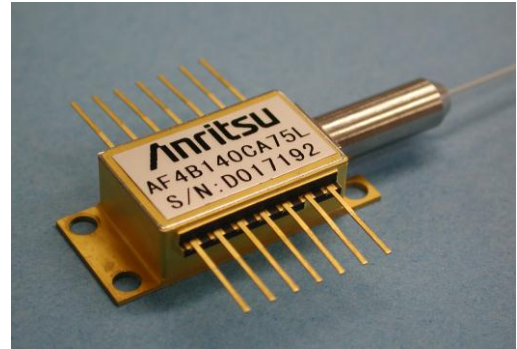


1.48 μ m LD Module AF4B SERIES type C output power 300mW ~ 400mW

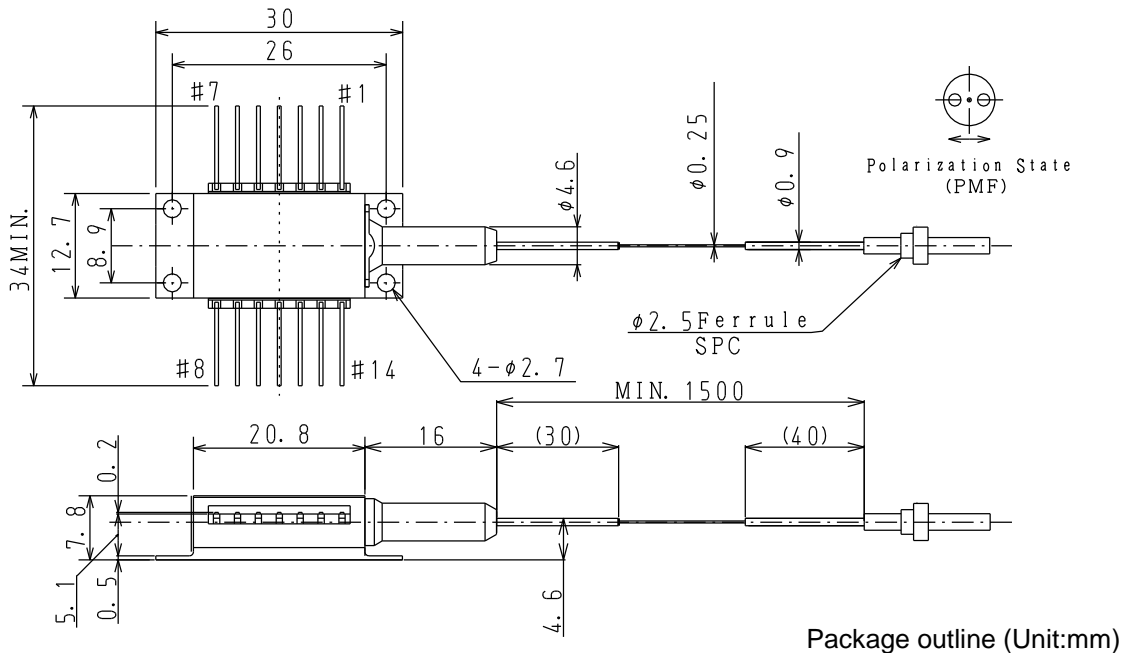
The AF4B SERIES type C is 1.48 μ m high power laser diode modules designed for Er doped fiber amplifier. The laser is packaged in a 14-pin butterfly package with optical isolator, monitor photodiode and thermo-electric cooler (TEC).

FEATURES

- ◆ Optical output :
 - 300mW ($I_F \leq 1100\text{mA}$) AF4B130CA75L / AF4B130CD75L
 - 350mW ($I_F \leq 1400\text{mA}$) AF4B135CA75L / AF4B135CD75L
 - 400mW ($I_F \leq 1400\text{mA}$) AF4B140CA75L / AF4B140CD75L
- ◆ Fiber
 - SMF output (UV coating fiber: $\phi 0.25\text{mm}$)
 - PMF output (UV coating fiber: $\phi 0.25\text{mm}$)
- ◆ 14pin butterfly package
- ◆ Built-in optical isolator
- ◆ Internal monitor PD and TEC
- ◆ Low power consumption



DIMENSIONS



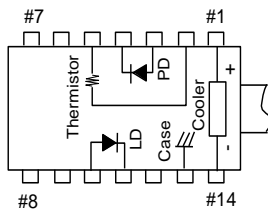
(Note) Polarization state of LD is aligned parallel to the slow axis.

■ ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Rating			unit
		AF4B130CA75L AF4B130CD75L	AF4B135CA75L AF4B135CD75L	AF4B140CA75L AF4B140CD75L	
LD Forward Current	IF	1500	1700		mA
LD Reverse Voltage	VR	2			V
PD Forward Current	IFD	10			mA
PD Reverse Voltage	VRD	20			V
Operating Case temperature	Tc	-20~+70			°C
Storage temperature	Tstg	-40~+85			°C
Cooler Current	Ic	5.8			A

* Excess over the absolute maximum ratings may lead to damage.

■ Top View



■ 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

■ OPTICAL AND ELECTRICAL CHARACTERISTICS (T_{LD}=25°C, T_C=25°C)

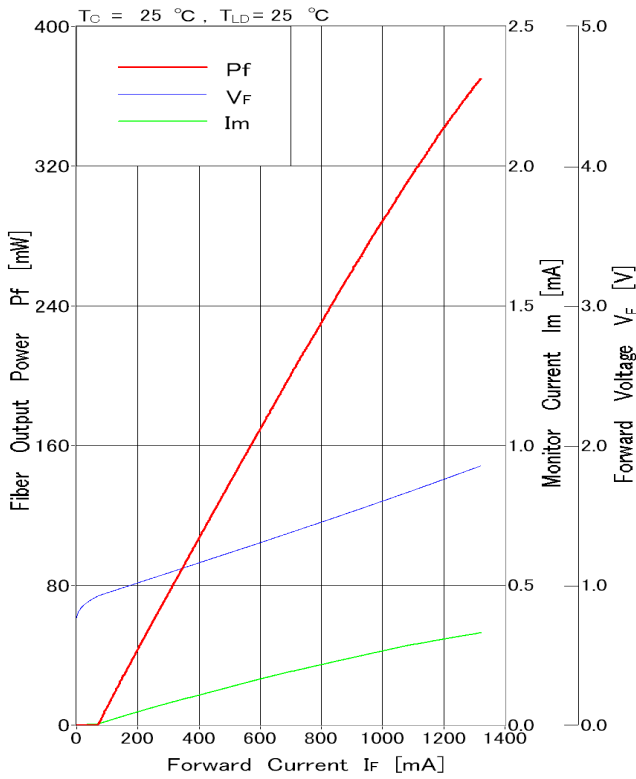
Item	Symbol	Test condition		AF4B130CA75L AF4B130CD75L	AF4B135CA75L AF4B135CD75L	AF4B140CA75L AF4B140CD75L	Unit
Output power	Pf			300	350	400	mW
Forward Voltage	VF	At Output Power	Max.	2			V
			Typ.	100			mA
			Max.	150			
Forward Current (BOL)	IF	At Output Power	Max.	1100	1400		mA
			Min.	1460			nm
				Typ.	1475		
Max.	1490						
Spectral width	$\Delta\lambda$	At Output Power RMS (-20dB)	Typ.	5			nm
			Max.	10			
Monitor Current	Im	At Output Power VRD=5V	Min.	100			μ A
			Typ.	-			
			Max.	2000			
PD Dark Current	Id	VRD=5V	Max.	0.1			μ A
Tracking Error	Δ Pf	Im=const, Tc=-20~70°C	Max.	0.5			dB
Cooler Voltage	Vc	IF=*EOL, Tc=70°C	Max.	2.9	3.1		V
Cooler Current	Ic	IF=*EOL, Tc=70°C	Max.	2.7	3		A
Thermistor Resistance	Rth	TLD=25°C B=3900±100K	Min.	9.5			KΩ
			Typ.	10			
			Max.	10.5			
Optical Isolation	Ro	TLD=25°C	Typ.	30			dB
Extinction Ratio ²	Xp	At Output Power	Min.	17			dB

*EOL=BOL × 1.2

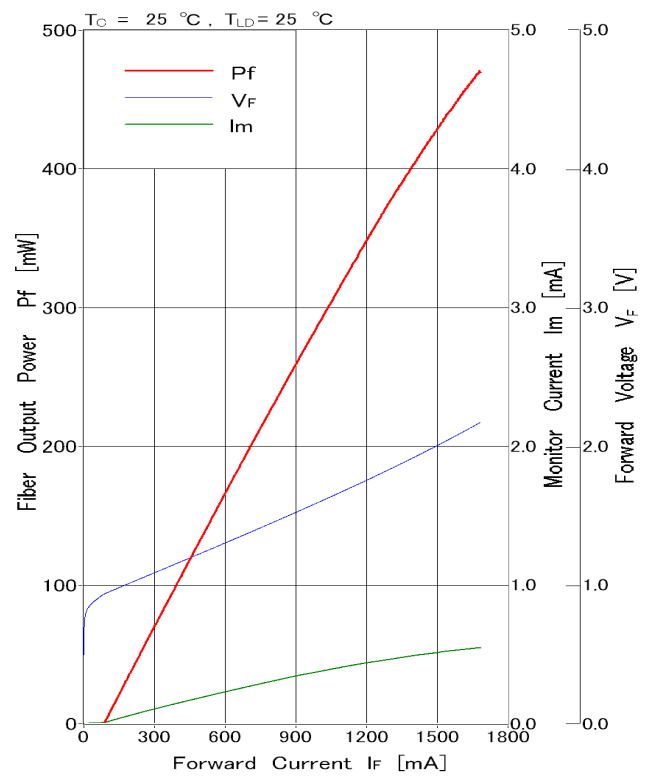
² Only PMF

■ AF4B SERIES type C TYPICAL CHARACTERISTICS

- ◆ Fiber output power / Monitor Current / Voltage-Forward current characteristics / Emission spectrum

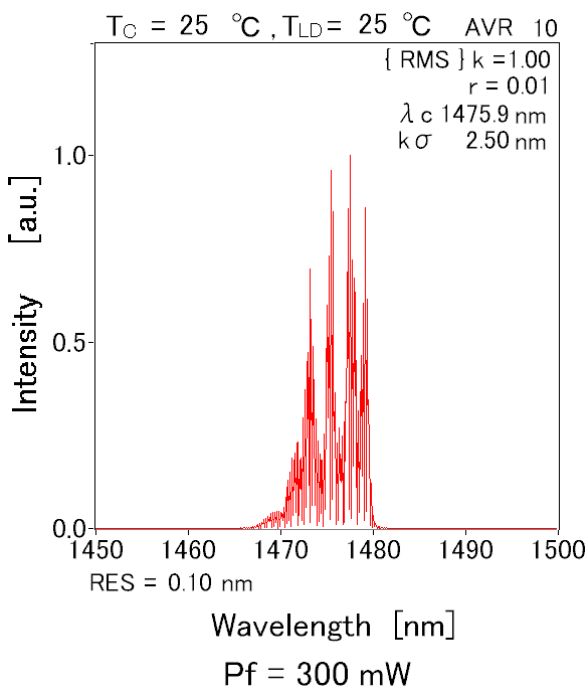


【AF4B140CA75L】

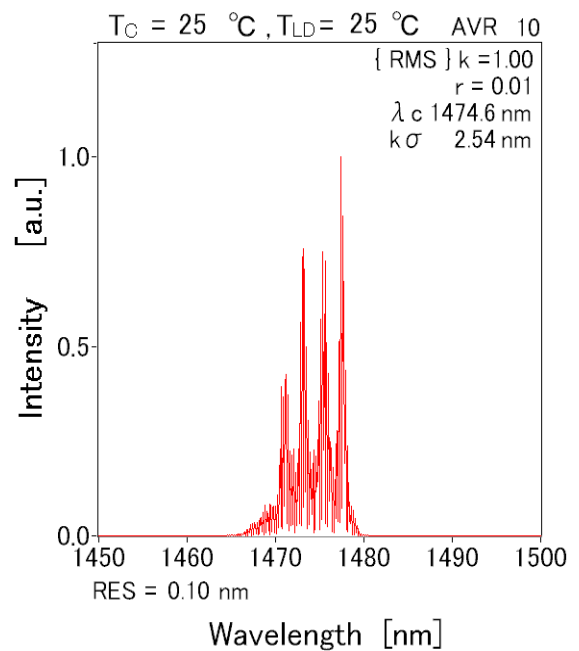


◆ EMISSION SPECTRUM

【AF4B130CA75L】

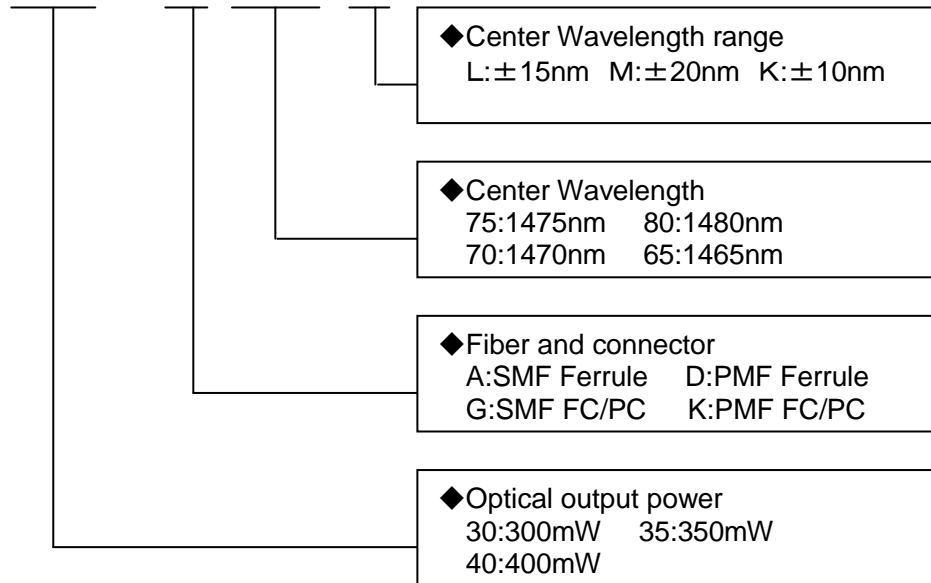


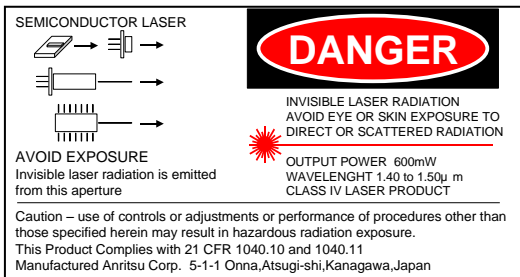
【AF4B140CA75L】



■ ORDERING INFORMATION

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





Anritsu Corporation reserves the right to change the design or specification of the product at any time without notice.

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