

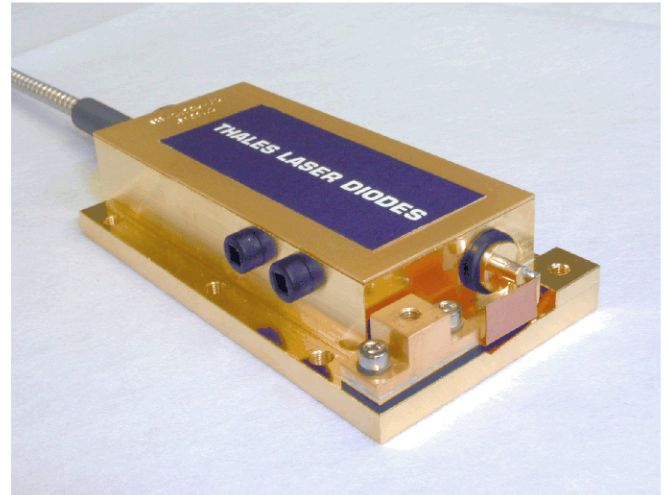
High power fiber coupled CW diode bars at 840nm

DESCRIPTION

The TH-C3xyy-Fz series are high optical power fiber coupled laser diode sources. CW power up to 30W are ideal for applications which request high brightness sources like for efficient pumping solid state lasers, medicine, material processing, micromachining...

The optical power is delivered through a single multimode fiber terminated by a SMA connector. These products integrate highly performing microoptics. Small fiber diameter and low numerical aperture lead to high brightness and high optical power density.

The diode bar structure use quantum well technology which gives high efficiency and reliability.



MAIN FEATURES

- Up to 30W CW optical output power
- Optical connectors SMA 905 (male)
- Standard fiber length: 1.5m other length on request
- Conductively cooled package

SPECIFICATIONS

Fiber Numerical aperture: 0.22

Temperature (internal sensors) : 25°C

PARAMETERS		TH-C3610-F2	TH-C3715-F4	TH-C3720-F4	TH-C3825-F4	TH-C3830-F4	TH-C3720-F6	TH-C3825-F6	TH-C3830-F6
Fiber core diameter	µm	200	400				600		
Wavelength tolerance (+/-)	nm	4	3	3	3	4	3	3	4
CW output power	W	10	15	20	25	30	20	25	30
Spectral width (FWHM)		3	3	3	3	3	3	3	3
	max	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Threshold current	typ.	6	10	10	10	10	10	10	10
	max	10	12	12	12	12	12	12	12
Operating current	typ.	18	30	35	43	47	34	41	46
	max	25	35	40	46	50	38	44	56
Operating voltage	typ.	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	max	2	2	2	2	2	2	2	2
Total efficiency	%	29	28	30	31	34	31	32	34

- Variation of wavelength is approximately 0.26 nm/°C
- Power monitoring : photodiode upon request
- Expected lifetime >10 000 hours
- Fiber with NA 0.16 available on request
- Standard fiber coating: metallic coating, PVC coating on request
- Red aiming beam on request

ABSOLUTE MAXIMUM RATINGS

PARAMETERS	TH-C3610-F2*	TH-C3715-F4*	TH-C3720-F4	TH-C3825-F4*	TH-C3830-F4*	TH-C3720-F6*	TH-C3825-F6*	TH-C3830-F6*	UNITS
CW output power	11	17	22	27	33	22	27	33	Watt
Reverse voltage	3	3	3	3	3	3	3	3	Volt
Case Operating temperature	+5 to +35								°C
Storage temperature	-30 to +65								°C

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