

# TH-C1725-N<sub>(3)</sub> / TH-C1730-N<sub>(3)</sub>

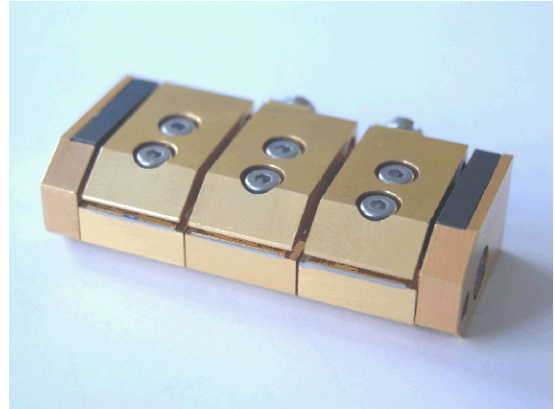
## ACTIVELY COOLED 25W / 30W CW LINEAR BAR ARRAYS

### DESCRIPTION

The TH-C17XX-N<sub>(3)</sub> products are based upon highly performing 25W CW and 30W CW Laser Diode Bar Arrays. The Laser Diode structure is multiple emitters spaced on a monolithic 1cm "bar". The bar is mounted with the active zone (P-side down) towards an actively cooled submount.

The quality of the improved epitaxial quantum well structure and of the process leads to a strong increase in electrical to optical conversion efficiency and reliability.

The actively cooled package has an unique design for easy association in series of 3 TH-C17xx-N elements. So, up to 90W CW (for TH-C1730-N<sub>3</sub> association) are emitted over a line of 3.5cm. This compact association is an ideal solution to implement powerful solid state laser pumping, illuminators...



### MAIN FEATURES

- 25W CW and 30W CW optical power per element
- Monolithic linear array
- 795 to 860nm wavelength range
- Highly reproducible MOCVD process
- Actively cooled package
- Specific assembly design for high packing density

### SPECIFICATIONS

Fluid temperature : 25°C

Flow rate : 1 l/mn

PARAMETERS	TH-C1725-N <sub>(3)</sub>	TH-C1730-N <sub>(3)</sub>	UNITS
CW output power	75	90	Watt
Emitting area	10 x 0.001	10 x 0.001	mm x mm
Threshold current	9	9	Amp.
Operating current	34	39	Amp.
Operating voltage	5.7	5.8	Volt
Total efficiency	39 to 45	41 to 47	%
Beam divergence (FWHM)	10 x 35	10 x 35	degree

#### Note:

- Variation of wavelength is approximately 0.26 to 0.3 nm/°C
- Standard wavelength is 808nm
- Tolerance on wavelength is +/- 3nm
- Spectral width is ≤ 3nm FWHM
- Other wavelength selections are available in the range of 795nm to 860nm

**ABSOLUTE MAXIMUM RATINGS**

PARAMETERS	TH-C1725-N <sub>(3)</sub>	TH-C1730-N <sub>(3)</sub>	UNITS
CW output power	27	32	Watt
Reverse voltage	3	3	Volt
Operating temperature	+5 to +35	+5 to +35	°C
Storage temperature	-40 to +85	-40 to +85	°C

**Note :** Operation at temperature below dew point requests to use dry N2 environment

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