

TH-C1420-P / TH-C1417-PO

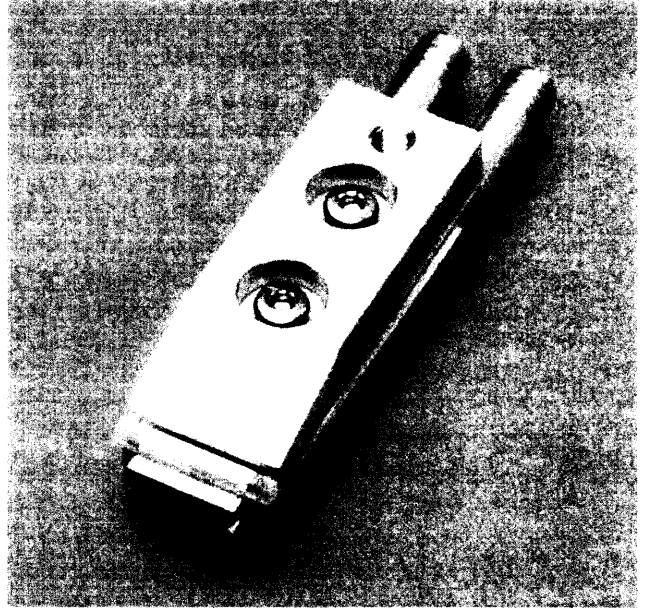
ACTIVELY COOLED 20W CW LINEAR BAR ARRAY (17W CW COLLIMATED)

DESCRIPTION

The TH-C1420-P product is a highly performing 20W CW Laser Diode Bar Array soldered on a water cooled package. The Laser Diode structure is multiple emitters spaced on a monolithic 1cm "bar". The bar is mounted P side down, with the active region towards an actively cooled submount.

The epitaxial quantum well structure and the process quality, lead to high electrical/optical conversion efficiency and reliability.

The actively cooled package has a specific design for efficient thermal management. Fast axis collimation is also proposed, TH-C1417-PO, with the adjonction of a compact optics. This product is an unique solution for flexible integrations to implement powerful solid state laser pumping, illuminators....



TH-C1417-PO (collimated)

MAIN FEATURES

- 20 W CW optical power
- A collimated beam version
- Actively cooled package
- Monolithic linear array
- 795 to 860nm wavelength range
- Highly reproducible MOCVD process
- Highly reliable product

SPECIFICATIONS

Fluid temperature: 25°C

Flow rate : 1 l/mn

PARAMETERS	TH-C1420-P	TH-C1417-PO collimated	UNITS
CW output power	20	17	Watt
Emitting area	10 x 0.001	10 x 0.6	mm x mm
Threshold current	7	7	Amp.
Operating current	27	29	Amp.
Operating voltage	1.85	1.85	Volt
Total efficiency	42	33	%
Beam divergence (FWHM)	10 x 35	10 x 1	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 \leq 3nm FWHM
- Other wavelength selections are available in the range of 795nm to 860nm

ABSOLUTE MAXIMUM RATINGS

PARAMETERS	TH-C1420-P	TH-C1417-PO	UNITS
CW output power	24	20	Watt
Reverse voltage	3	3	Volt
Operating temperature	+5 to +35	+5 to +35	°C
Storage temperature	-40 to +85	-40 to +85	°C

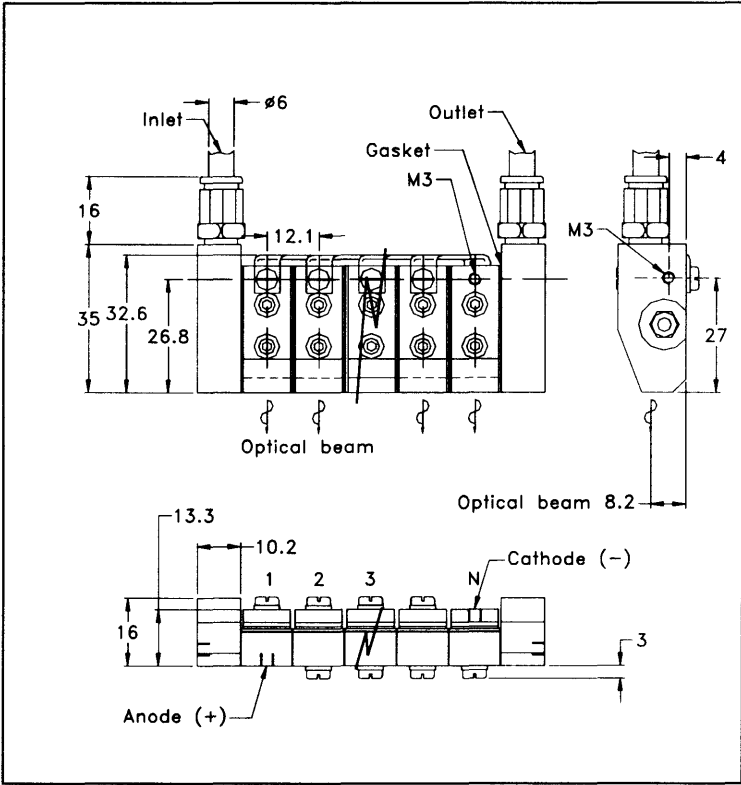
Note : Operation at temperature below dew point requests to use dry N2 environment

PACKAGE SPECIFICATION :

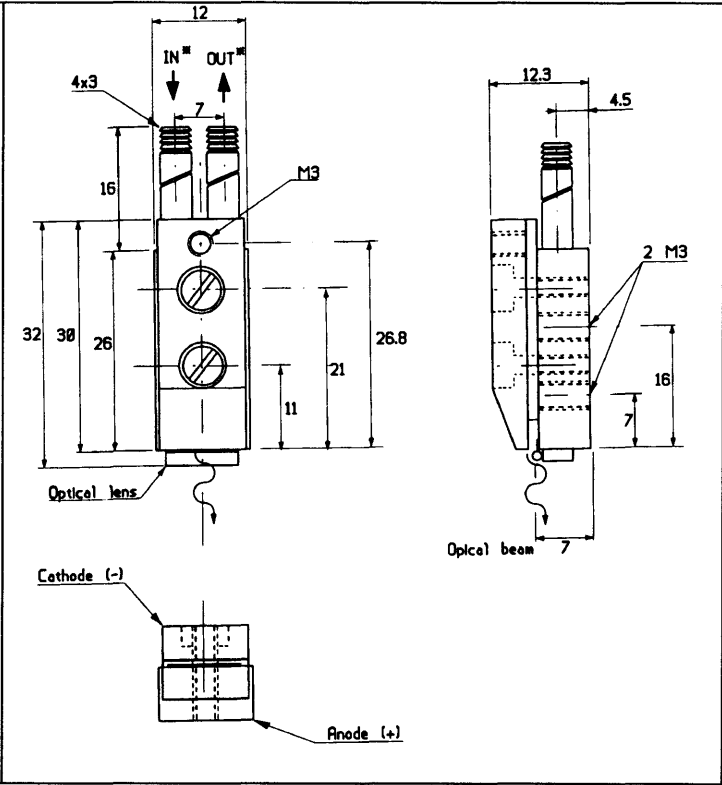
- dimensions are in mm
- standard tolerances are ± 0.2 mm

COOLING : Water

- Flow : 1 l/mn
- Pressure : 0.5 bar
- Temperature : 25 °C



TH-C1420-P



TH-C1417-PO

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