

TH-C4840-H / TH-C5840-H/ TH-C6840-H

CONDUCTIVELY COOLED CW LINEAR BAR ARRAY 40 W 915 nm – 980 nm

DESCRIPTION

The TH-C4840-H, TH-C5840 and TH-C6840-H products are based upon highly performing 40W 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) towards a conductively cooled submount.

The quality of new epitaxial quantum well structure and of the process leads to high electrical to optical conversion efficiency and reliability.

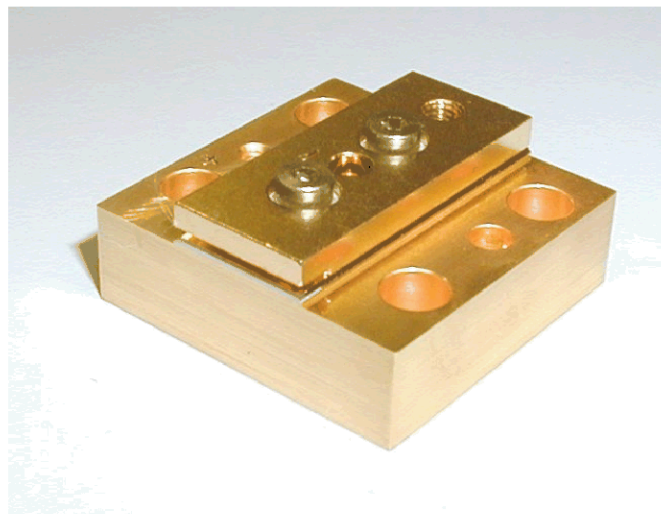
The conductively cooled 'H' package is designed for an easy connection to heat exchanger for efficient thermal management. This allows accurate adjustment of the wavelength for the design of efficient pumping sources.

The following wavelength are available:

TH-C-4840-H for wavelengths around 915 nm

TH-C-5840-H for wavelengths around 940 nm

TH-C-6840-H for wavelengths around 980 nm



MAIN FEATURES

- 30W & 40W CW optical power
- Low divergence
- Conductively cooled package 'H' type
- Optional collimating lens

SPECIFICATIONS

PARAMETERS	TH-C4840-H	TH-C5840-H	TH-C6840-H	UNITS	
CW output power	40	40	40	Watt	
wavelength	915	940	980	nm	
Emitting area	10 x 0.001			mm x mm	
Threshold current	9	10	11	Amp.	
Operating current	Typical Max	45 51	46 52	47 53	Amp.
Operating voltage	Typical Max	1.8 2	1.8 2	1.8 2	Volt
Total efficiency	Typical	49	48	47	%
Beam divergence (FWHM)	10 x 35			degree	

Note :

- Variation of wavelength is approximately 0.25 to 0.3 nm/°C
- Tolerance on wavelength is ± 4 nm
- Spectral width (FWHM) is ≤ 4 nm
- Optional fast-axis collimating lens

ABSOLUTE MAXIMUM RATINGS

PARAMETERS	TH-C4840-H	TH-C5840-H	TH-C6840-H	UNITS
CW output power	42	42	42	Watt
Reverse voltage	3			Volt
Operating temperature	+5 to +35			°C
Storage temperature	-40 to +85			°C

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

PACKAGES SPECIFICATION

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

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