

# EYP-MNT-0000-00000-0000-CLP01-9000

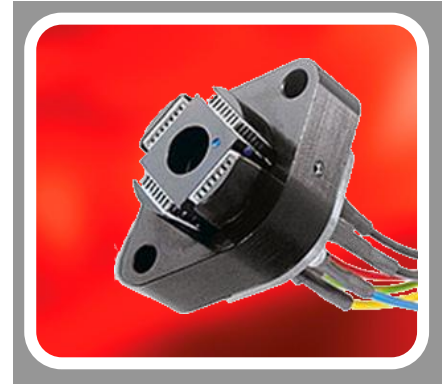
## ColdPack

TO-3 Adapter with integrated Thermoelectric Cooler



### General Product Information

Product	Application
Mount for Thermal Control of Laser Diodes	Cooling
- with integrated Thermoelectric Cooler and Thermistor	Temperature Control
- for Laser Diodes with standard 9 mm (or 5.6 mm*) TO package	Wavelength Tuning
- Product does not include Laser Diode or Temperature Controller	
*) with optional TO-56 Adapter Ring (see Order Codes on p. 3)	



### Characteristics

	Symbol	Unit	min	typ	max
Storage Temperature	$T_S$	°C	-40		85
Operational Temperature at Laser Case	$T_{LD}$	°C	0		50
Current	$I_F$	A			1.2
Voltage	$V_R$	V			17.2

#### Measurement Conditions / Comments

$T_{ColdPack\ case} = 25^\circ C$ , heat load  $Q_{max} = 11.2 W$

Stress in excess of the maximum ratings can cause permanent damage to the device

### Thermistor (Standard NTC Type)

Parameter	Symbol	Unit	min	typ	max
Resistance	$R_0$	k $\Omega$		10	
Beta Coefficient	$\beta$			3895	

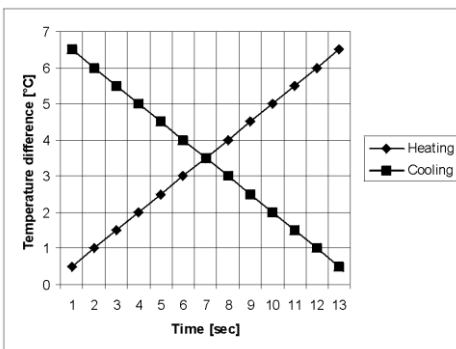
#### Measurement Conditions / Comments

$R = R_0 \exp(\beta/T - \beta/T_0)$

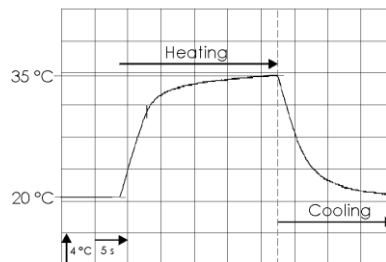
Reference Temperature  $T_0 = 298 K$

### Typical Measurement Results

Temperature Scan



Temperature Response



Performance figures, data and any illustrative material provided in this specification are typical and must be specifically confirmed in writing by eagleyard Photonics before they become applicable to any particular order or contract. In accordance with the eagleyard Photonics policy of continuous improvement specifications may change without notice.

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Revision 0.90

2013-08-26

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## ColdPack

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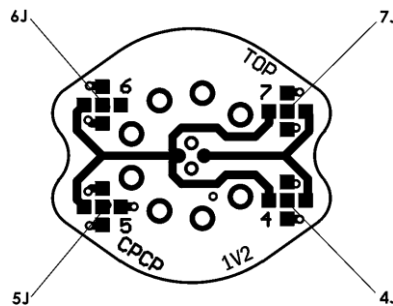
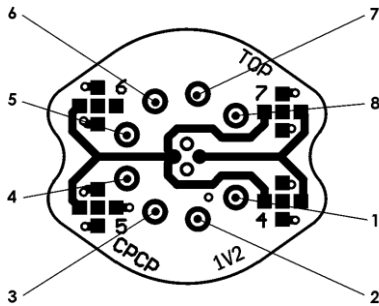


### Pin Assignment

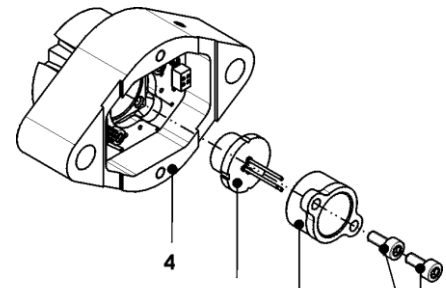
- Pin 1 TEC (+)
- Pin 2 Thermistor 1
- Pin 3 Thermistor 2
- Pin 4 Laser Diode cathode (-)
- Pin 5 Laser Diode anode (+)
- Pin 6 Monitor Photodiode anode
- Pin 7 Monitor Photodiode cathode
- Pin 8 TEC (-)

### Soldering Pads

- Pad 4J Laser Diode cathode (-)
- Pad 5J Laser Diode anode (+)
- Pad 6J Monitor Photodiode anode
- Pad 7J Monitor Photodiode cathode



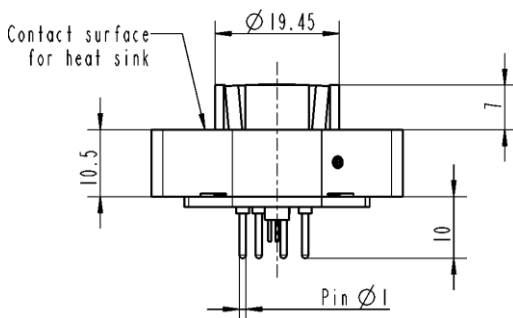
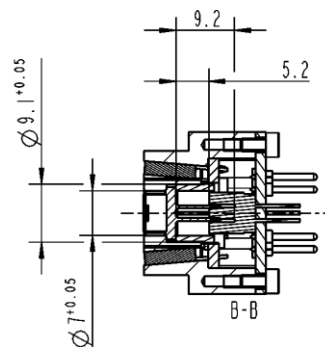
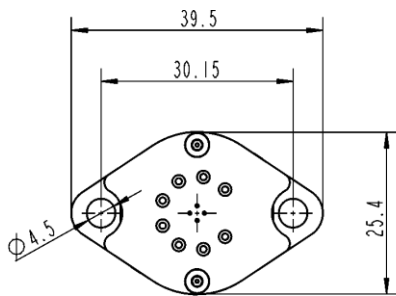
### Fixation of the Laser Diode<sup>1)</sup>



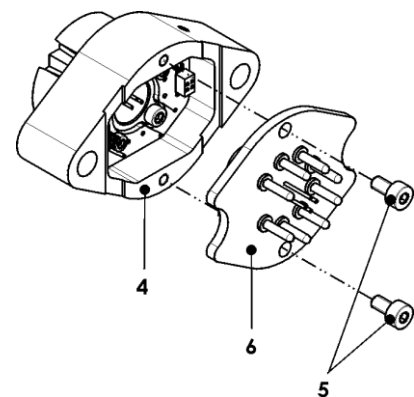
- 1 Screws
- 2 Ring
- 3 Laser Diode<sup>1)</sup>
- 4 ColdPack Mount

1) The ColdPack does not include a laser diode

### Package Drawings



### Fixation of the ColdPack Connector PCB



- 4 ColdPack Mount
- 5 Screws
- 6 Connector PCB

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Thermoelectric Cooler



### Product Content

**Product**

ColdPack Assembly (includes parts shown on p. 2 except the laser diode)

1 Set of Cables (Length: 210 mm)

2 Allen Screws (M2.5 x 16)

2 Allen Screws (M3 x 16)

2 Belleville Washers

2 Washers

**Comment**

can be used alternatively to the M2.5 screws

can be used alternatively to the M3 screws

### Order Code Scheme

**Product**

ColdPack

Adapter Ring for Laser Diode 5.6 to 9 mm (optional)

Integration of Laser Diode into ColdPack (optional)

**Order Code**

EYP-MNT-0000-00000-0000-CLP01-9000

EYP-MNT-0000-00000-0000-CLP01-9020

EYP-MNT-0000-00000-0000-CLP01-9100