Fiber-Coupled Diode Lasers
cw, passively cooled with air or tap water

JOLD-100-CPXF-2P A
JOLD-140-CPXF-2P W

Features:
• High optical output power up to 140 W cw
• Fiber core diameter: 400 μm (NA 0.22)
• Long lifetime > 20,000 h, high reliability
• Air cooling possible

Applications:
• Pumping of solid-state lasers and fiber lasers
• Material processing
• Medical applications
Fiber-Coupled Diode Lasers  
cw, passively cooled with air or tap water

Preliminary Specifications  (Start of Life)

<table>
<thead>
<tr>
<th>Product</th>
<th>JOLD-100-CPXF-2P A</th>
<th>JOLD-140-CPXF-2P W</th>
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<tbody>
<tr>
<td>Design</td>
<td>21553524</td>
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**Operation Mode**
cw, power modulation only between threshold and maximum current

<table>
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<tr>
<th>Maximum Optical Output Power</th>
<th>100</th>
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<tr>
<td>Center Wavelength at 25 °C</td>
<td>880 *</td>
<td>915 *</td>
<td>938 *</td>
<td>976 *</td>
<td>880</td>
<td>915</td>
<td>938</td>
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Fiber Core Diameter, Numerical Aperture 400 μm, NA 0.22; free standing fiber inside F-SMA 905 towards the module

Power Monitor Infineon, SFH 229

Pilot Laser 0.5 ... 3 mW, 650 nm ± 15 nm, 3 ... 5 V, 40 ± 15 mA, power not adjustable (only for teaching and targeting purposes before laser operation)

Anode, Cathode Connectors M8, M6 (e.g. socket cap screws ISO 4762)

Signal Connector D-Sub, male, 15 pin

Operation Conditions Non-condensing atmosphere

Expected Lifetime (Constant Current) > 10,000 h > 20,000 h, partly under qualification; 808 nm: 10,000 h

**Cooling:**

Flow Rate > 3 l/min

Water Temperature 8 ... 20 °C

Water Pressure 400 kPa maximum inlet and outlet pressure, < 80 kPa pressure drop

Water Connectors Ø 6 mm push-in fittings

Water Quality Industrial water, unfiltered up to a particle size of 0.5 mm

Diode Laser Operating Temperature 15 ... 55 °C, measured with internal sensor, *wavelength specification at 50 °C

Integrated Temperature Sensor PT 100 (PT 1000 or NTC 10 k optional), separately for each diode laser

Note Specify exact wavelength needed with your order

See General User Information!

Design 215535424

Specifications may change in compliance with our quality management system.

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