ALC-0915-34000-FM200.22 QUINTA

Overview

Main Features

- **915 nm / 34 W**
- **200 µm core fiber**
- **Detachable fiber**
- **Compact footprint**
- **Fiber sensor (optional)**
- **Temperature sensor**
- **Power monitor (optional)**
- **Visible pointer (optional)**

QUINTA Package

Typical Performance Characteristics

Parameter	Symbol	LD	Unit
Operating temperature	T	20	°C
Operating power ex-fiber	P_{op}	34	W
Center wavelength	λ	915±10	nm
Spectrum width, $1/e^2$	Δλ	<7	nm
Wavelength-temperature coefficient	Δλ/ΔT	0.3	nm/°C
Linearized wavelength-current	Δλ/ΔI	0.6	nm/A
Threshold current	I_{th}	0.65	A
Differential efficiency	η_{ext}	3.6	W/A
Operating current	I_{op}	10.0	A
Operating voltage	V_{op}	7.4	V
Maximum current (10 seconds)	I_{max}	12.0	A
Power monitor photodiode current	I_{mon}	>0.05	mA
Detachable fiber connector		SMA	
Fiber core diameter	D_{fiber}	200	µm
Fiber NA		0.22	

OPTIONAL POINTER: >1mW at 638±5nm, 2.9V operating voltage, typical drive current <30mA

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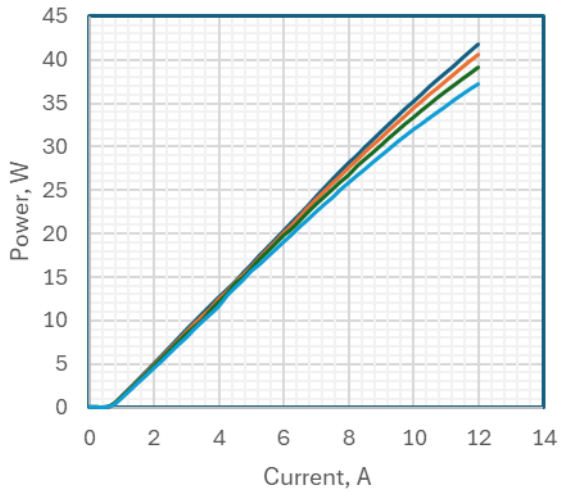
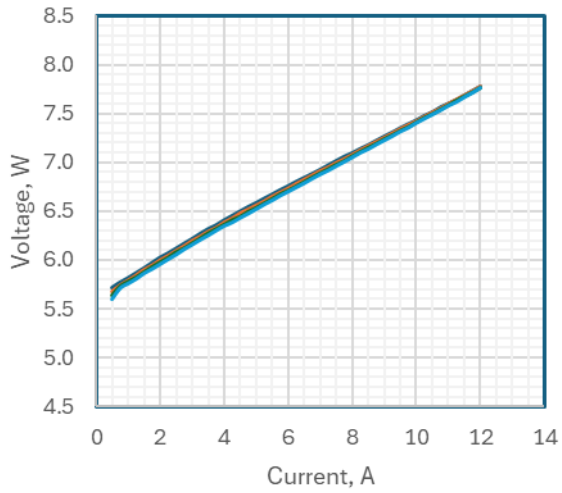
Electro-optical characteristics

P-I at different temperatures



P-I at (downward): 15°C-25 °C-35 °C-45 °C.

V-I at different temperatures

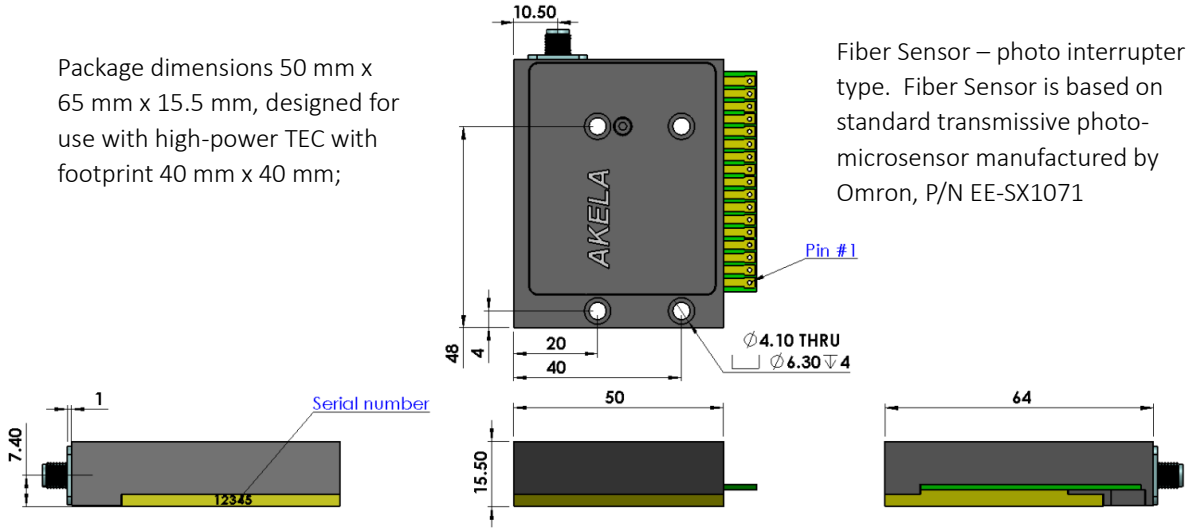


V-I at (downward): 15°C-25 °C-35 °C-45 °C.

Dimensions and Pinout

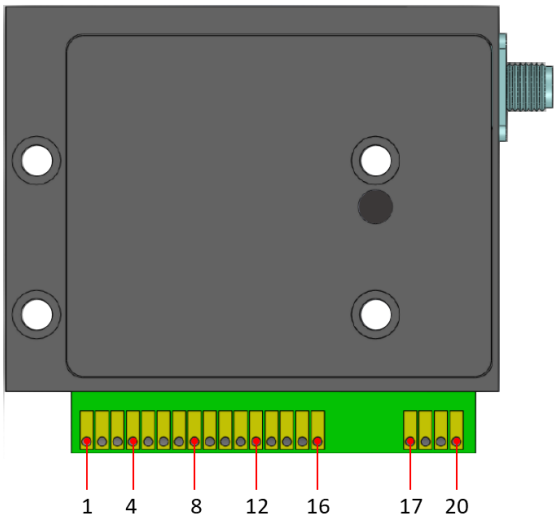
Mechanical Drawings

Package dimensions 50 mm x 65 mm x 15.5 mm, designed for use with high-power TEC with footprint 40 mm x 40 mm;



Fiber Sensor – photo interrupter type. Fiber Sensor is based on standard transmissive photo-microsensor manufactured by Omron, P/N EE-SX1071

Pinout



Pin #	Function
1	Red pointer (+)
2	Red pointer (-)
3	Power monitor photodiode (+)
4 & 5	Laser Diode (+)
6	Power monitor photodiode (-)
7-10	Not used
11 & 12	Thermistor outputs
13	Not used
14 & 15	Laser Diode (-)
16	Not used
17	Fiber Sensor Phototransistor Collector
18	Fiber Sensor Phototransistor Emitter
19	Fiber Sensor LED Cathode
20	Fiber Sensor LED Anode

Document Revision History

Revision Number	Revision Date	Nature of Revision	Approved by
1	July 6, 2024	New document created based on test data acquired in 2018-2024	*M.M.*

These components do not comply with the Federal Regulations (21 CFR Subchapter 1) as administered by the Center for Devices and Radiological health.

Purchaser acknowledges that his/her products must comply with these regulations before they can be sold.

Akela laser Corporation reserves right to change any specifications.