

ALC-1160-20000-FM365.22 QUINTA

Overview

Main Features

- 1160 nm / 20000 W
- 365 μ m core fiber
- Detachable fiber
- Compact footprint
- Fiber sensor (optional)
- Temperature sensor
- Power monitor (optional)
- Visible pointer (optional)

QUINTA Package



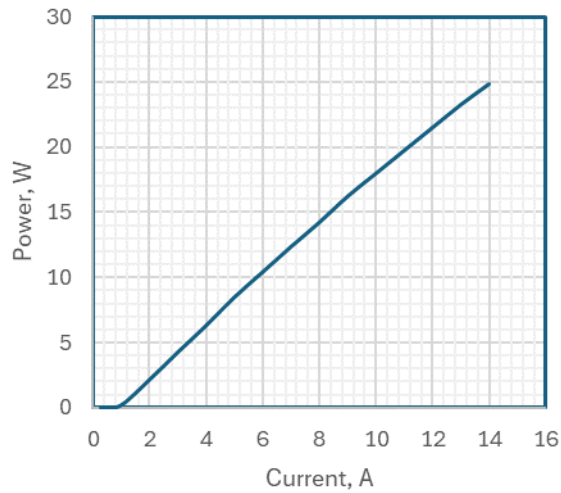
Typical Performance Characteristics

Parameter	Symbol	LD	Unit
Operating temperature	T	20	°C
Operating power ex-fiber	P _{op}	20	W
Center wavelength	λ	1160±14	nm
Spectrum width, 1/e ²	$\Delta\lambda$	<14	nm
Wavelength-temperature coefficient	$\Delta\lambda/\Delta T$	0.5	nm/°C
Linearized wavelength-current	$\Delta\lambda/\Delta I$	---	nm/A
Threshold current	I _{th}	1.2	A
Differential efficiency	η_{ext}	2.1	W/A
Operating current	I _{op}	12	A
Operating voltage	V _{op}	5.4	V
Maximum current (10 seconds)	I _{max}	14	A
Detachable fiber connector		SMA	
Fiber core diameter	D _{fiber}	365	μ m
Fiber NA		0.22	

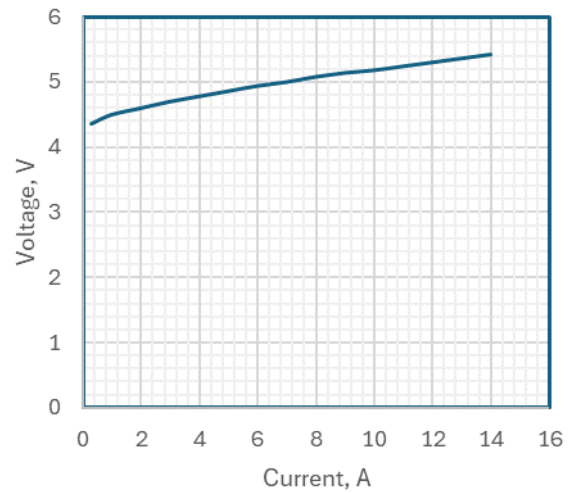
OPTIONAL POINTER: >1mW at 638±5nm, 2.9V operating voltage, typical drive current <30mA

Electro-optical characteristics

P-I at 20°C



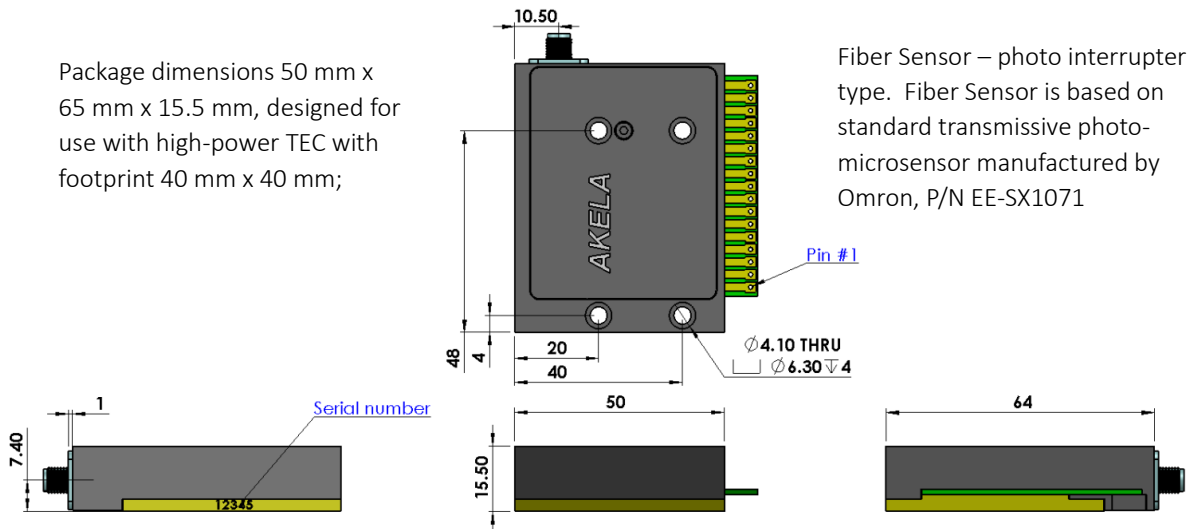
V-I at 20°C



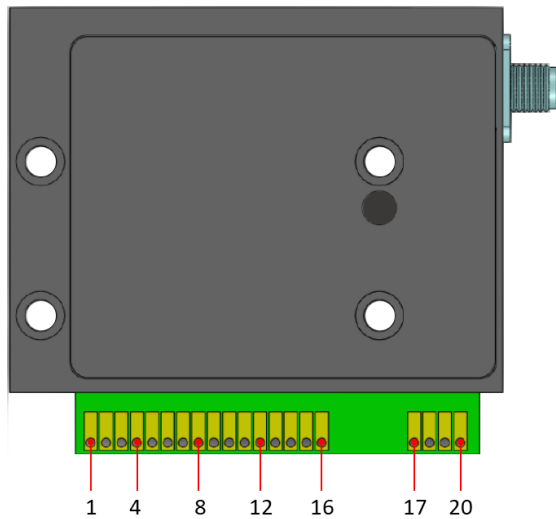
Dimensions and Pinout

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;



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	April 14, 2024	New document created	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.