ALC-750-12000-FM365.22 QUINTA

Overview

Main Features
• **750 nm / 12.0 W**
• **365 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}	12.0	W
Center wavelength	λ	750±7	nm
Spectrum width, $1/e^2$	Δλ	<6	nm
Wavelength-temperature coefficient	Δλ/ΔT	0.26	nm/°C
Linearized wavelength-current	Δλ/ΔI	0.74	nm/I
Threshold current	I_{th}	1.75	A
Differential efficiency	η_{ext}	3.45	W/A
Operating current	I_{op}	5.25	A
Operating voltage	V_{op}	7.5	V
Maximum current (10 seconds)	I_{max}	6.0	A
Power monitor photodiode	I_{mon}	>0.05	mA
Detachable fiber connector		SMA	
Fiber core diameter	D_{fiber}	365	µm
Fiber NA		0.22	

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

Electro-optical characteristics
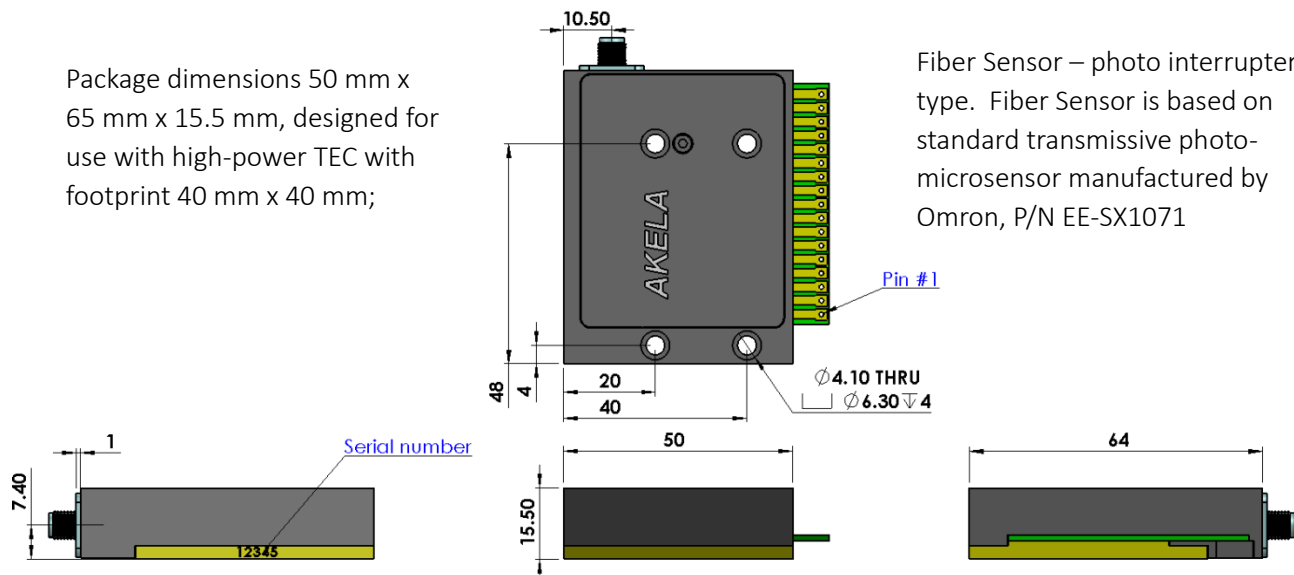
P-I at 20 °C
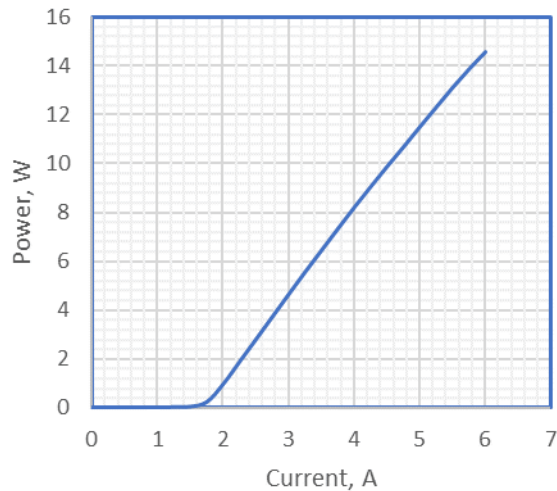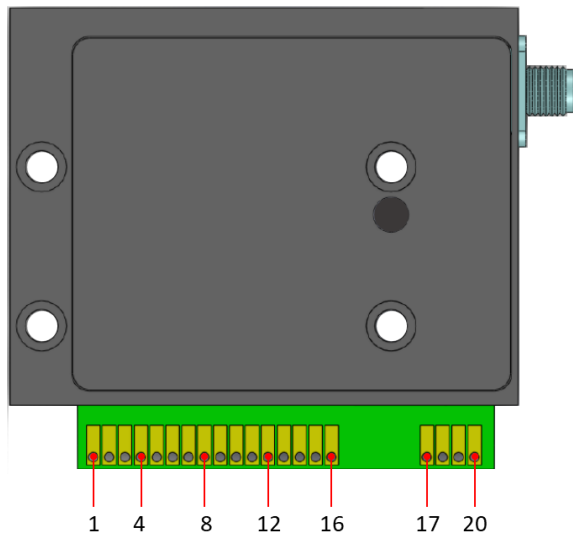

V-I at 20 °C
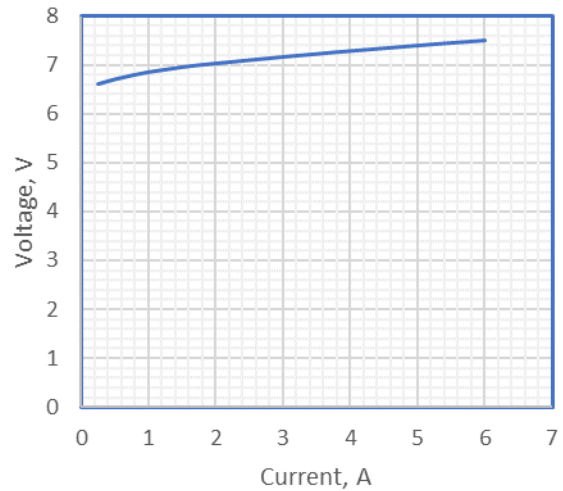
Dimensions and Pinout

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;

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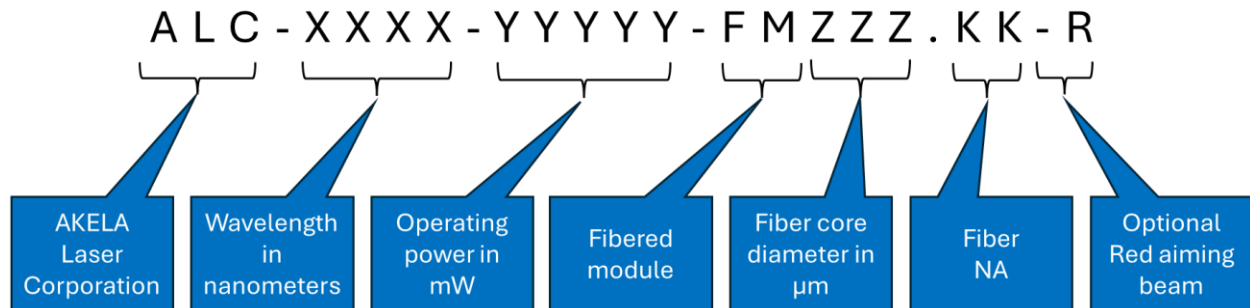
Pinout

Pin #	Function
1	Red pointer (+) *optional*
2	Red pointer (-) *optional*
3 – 8	Not used
9 and 10	Laser Diode (+)
11 and 12	Thermistor outputs
13	Power Monitor PD (+)
14 and 15	Laser Diode (-)
16	Power Monitor PD (-)
17	Fiber Sensor Phototransistor Collector
18	Fiber Sensor Phototransistor Emitter
19	Fiber Sensor LED Cathode
20	Fiber Sensor LED Anode

Part Number Notation

ALC - XXXX - YYYYY - FMZZZ.KK - R

- AKELA Laser Corporation
- Wavelength in nanometers
- Operating power in mW
- Fibered module
- Fiber core diameter in µm
- Fiber NA
- Optional Red aiming beam

Document Revision History

Revision Number	Revision Date	Nature of Revision	Approved by
1	April 9, 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.