

# ALC-0670-04500-FM400.22 SETIA

## Overview

### Main Features

- 670 nm / 4.5 W
- 400  $\mu\text{m}$  core fiber
- Detachable fiber
- Compact footprint
- Fiber sensor (optional)
- Temperature sensor
- Power monitor (optional)
- Visible pointer (optional)

### SETIA Package



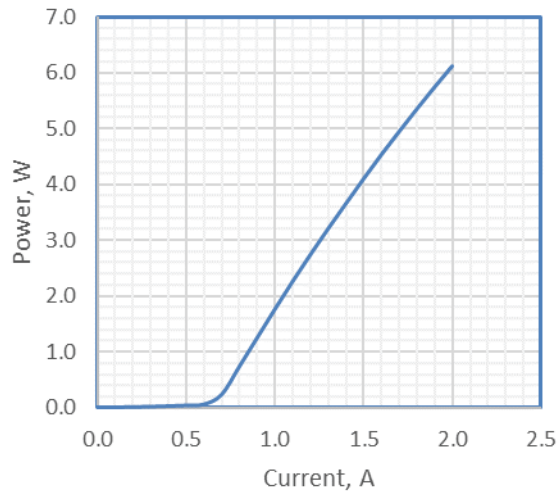
## Typical Performance Characteristics

Parameter	Symbol	LD	Unit
Operating temperature	T	20	$^{\circ}\text{C}$
Operating power ex-fiber	$P_{\text{op}}$	4.5	W
Center wavelength	$\lambda$	670 $\pm$ 8	nm
Spectrum width, 1/e <sup>2</sup>	$\Delta\lambda$	<6	nm
Wavelength-temperature coefficient	$\Delta\lambda/\Delta T$	0.17	nm/ $^{\circ}\text{C}$
Linearized wavelength-current	$\Delta\lambda/\Delta I$	-----	nm/A
Threshold current	$I_{\text{th}}$	0.68	A
Differential efficiency	$\eta_{\text{ext}}$	5.1	W/A
Operating current	$I_{\text{op}}$	1.65	A
Operating voltage	$V_{\text{op}}$	13.0	V
Maximum current (10 seconds)	$I_{\text{max}}$	2.0	A
Detachable fiber connector		SMA	
Fiber core diameter	$D_{\text{fiber}}$	400	$\mu\text{m}$
Fiber NA		0.22	

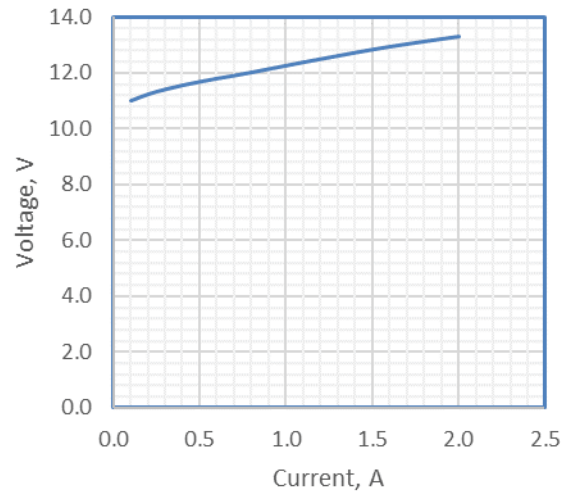
OPTIONAL POINTER: >1mW at 638 $\pm$ 5nm, 2.9V operating voltage, typical drive current <30mA

## Electro-optical characteristics

P-I at 20 °C

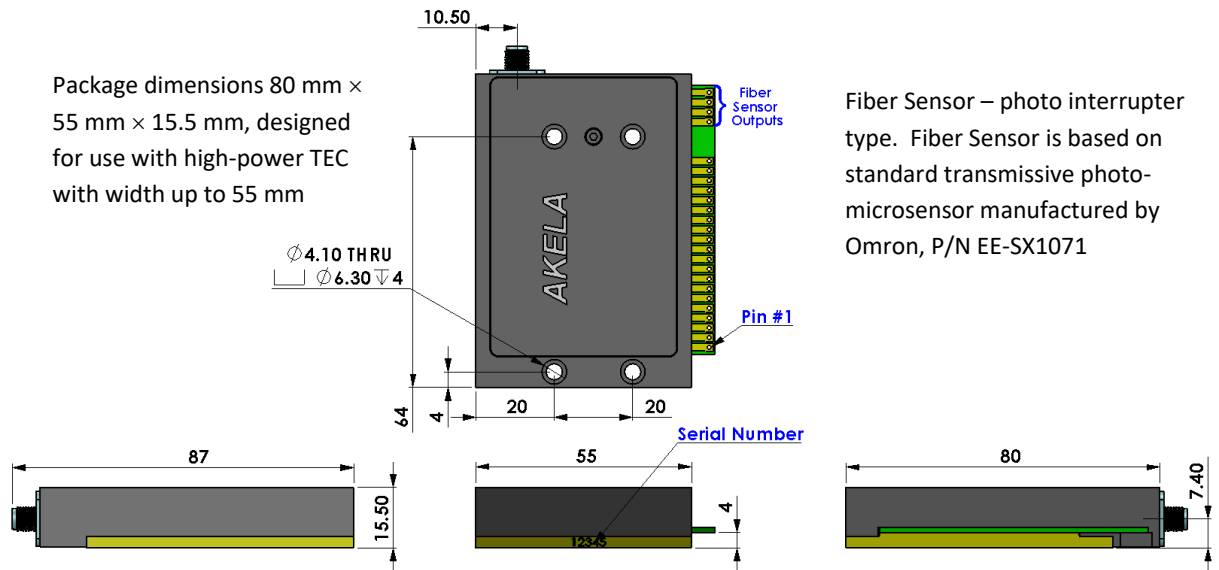


V-I at 20 °C

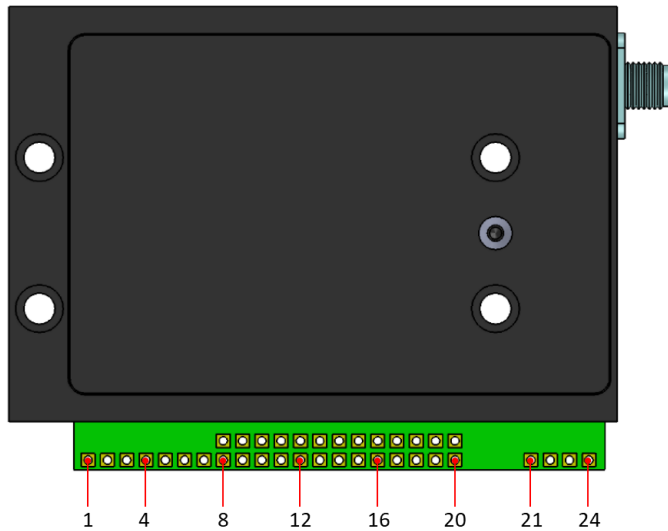


## Dimensions and Pinout

### Mechanical Drawings



## Pinout



Pin #	Function
1	Red pointer (+)
2	Red pointer (-)
3-7	Not used
8	Laser diode (+)
9-10	Not used
11 & 12	Thermistor outputs
13	Power monitor photodiode (+)
14-18	Not used
19	Laser diode (-)
20	Power monitor photodiode (-)
21	Fiber Sensor Phototransistor Collector
22	Fiber Sensor Phototransistor Emitter
23	Fiber Sensor LED Cathode
24	Fiber Sensor LED Anode

## Document Revision History

Revision Number	Revision Date	Nature of Revision	Approved by
1	April 8, 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.