

# LC-ASE-C-10

## OVERVIEW

LC-ASE-C-10 is a broadband fiber optical source of incoherent radiation based on amplified spontaneous emission.

## MAIN FEATURES

- Wavelength: 1560 nm
- Bandwidth 29 nm at -10 dB
- Optical power: up to 10 mW in CW mode
- Package: plastic case 100x80x10.5 and pump laser diode (package B, T or E)

## APPLICATIONS

- Laser Systems
- Optical Fiber Gyroscopes

## ORDERING INFORMATION

**LC-ASE-C-10-X-X-X-X**

Pump laser case type

**B:** compact coaxial with double-sided bracket and radiator  
**T:** 14 pins DIL with thermal stabilization (TEC and thermistor)  
**E:** 14 pins DIL with thermal stabilization (TEC and thermistor)  
It is necessary to provide heat removal from the case

Fiber type

**SM1:** G.657.A1, [Corning SMF-28 Ultra](#), furcation tubing Ø0.9 mm  
Standard fiber length 50 cm

Connector type

**FA:** FC/APC  
**N:** no connector

Certification

**CW:** CW mode

Version 20.2

# LC-ASE-C-10

## ABSOLUTE MAXIMUM RATINGS

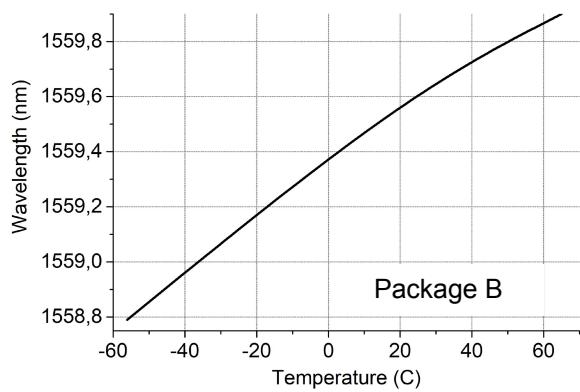
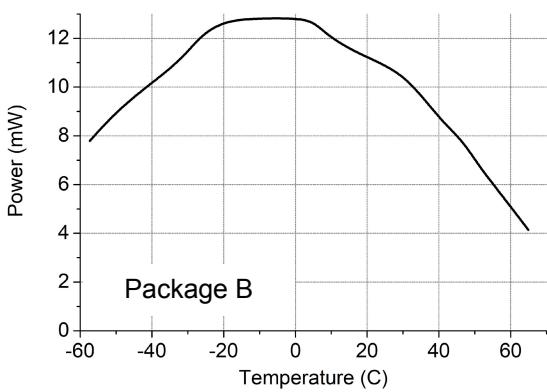
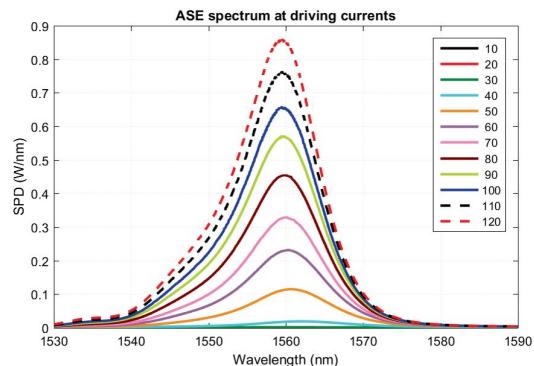
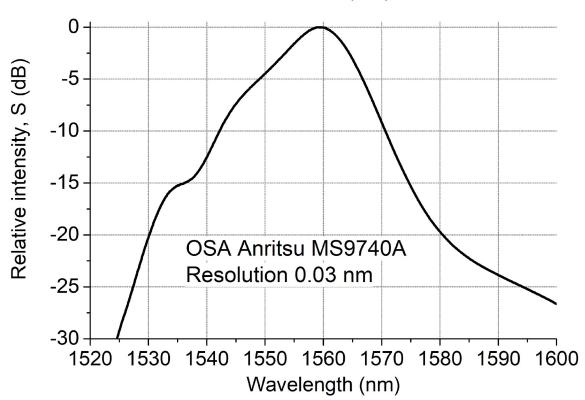
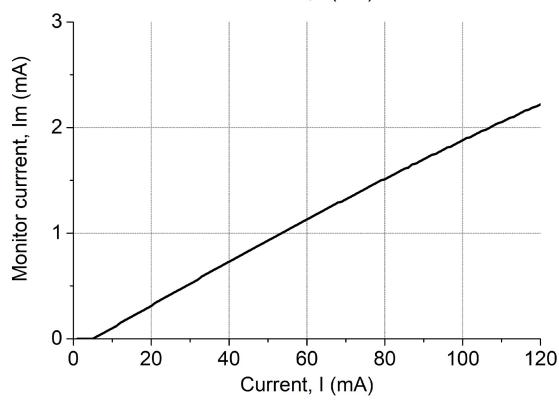
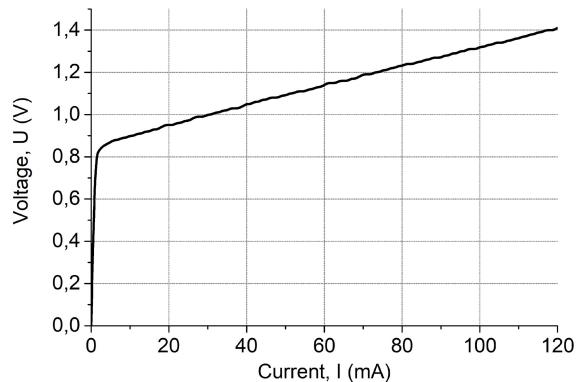
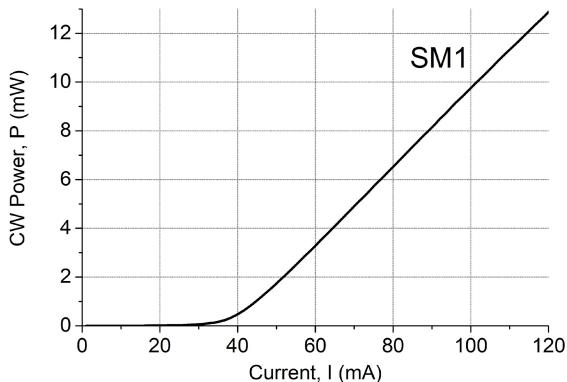
Parameter		Value	Unit	Conditions
Pump laser diode forward current	$I_{FL}$	140	mA	CW
Pump laser diode reverse voltage	$V_{RL}$	2	V	
Monitor photodiode reverse voltage	$V_{RP}$	30	V	
Operating temperature	$T_{op}$	-40 - +60 -40 - +50	°C	Package U, B, power < 3 mW Package T, E, BTF2
Storage temperature	$T_{stg}$	-50 - +80	°C	
Soldering temperature	$T_{sold}$	260	°C	Max. 10 seconds

## ELECTRICAL-OPTICAL CHARACTERISTICS ( $T = 25^\circ\text{C}$ )

Parameter		Min	Typ	Max	Unit	Conditions
Wavelength	$\lambda$		1560		nm	CW, P = 10 mW
Spectral width	$\Delta\lambda$		29		nm	CW, P = 10 mW, -10 dB
Wavelength-temperature coeff.	$d\lambda/dT$		6		ppm/°C	
Spectral ripple			0.3		%	CW, P = 10 mW
Threshold current	$I_{th}$		40		mA	CW
Operating current	$I_{op}$	105	120		mA	CW, P = 10 mW
Operating voltage	$V_{op}$		1.4	1.6	V	CW, P = 10 mW
Slope efficiency	$S_e$	0.12	0.16		mW/mA	CW
Monitoring output current (PD)	$I_m$	0.5		3	mA	CW, P = 10 mW, $V_{rd} = 5$ V
Mass			75		g	Package E

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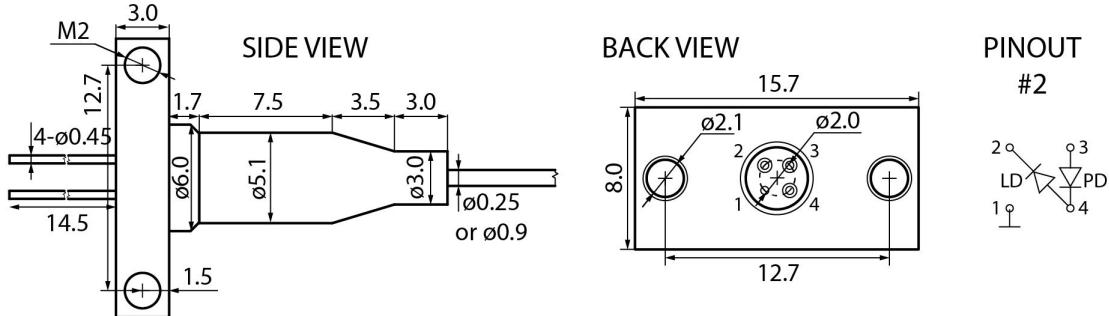
## CHARACTERISTICS (T = 25 °C)



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## PACKAGE TYPE AND ELECTRICAL CONNECTION

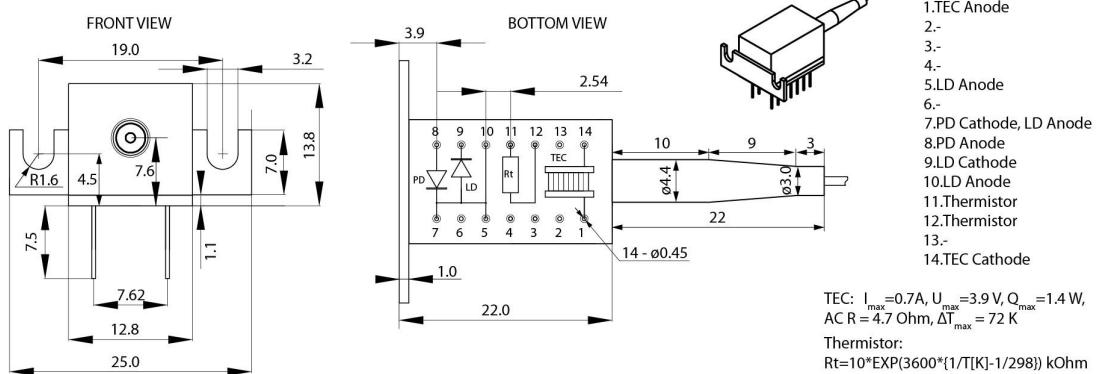
### PACKAGE B



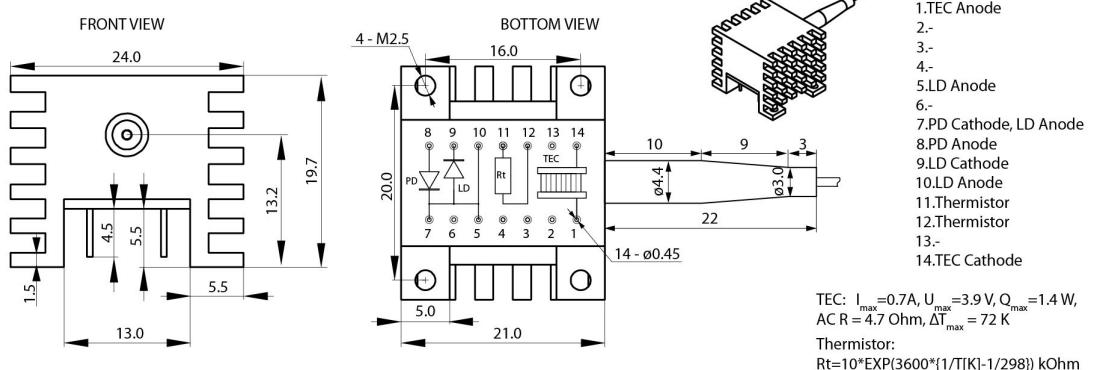
Connector FC/UPC, FC/APC, no connector, or by request

Fiber length 500+/-50, 1000+/-100, or by request

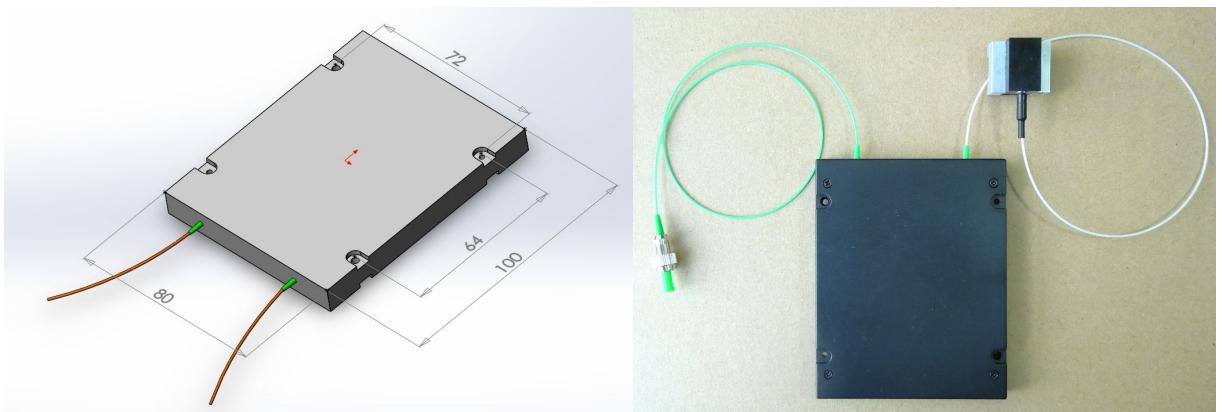
### PACKAGE T



### PACKAGE E



# LC-ASE-C-10



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Characteristics, data, materials and structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.

## Safety and handling cautions

1. Laser light is very dangerous if shot directly into human eyes. Do not look directly into the output connector aperture or through optical components such as lenses, prisms, mirrors, microscope objectives etc. Wear protective goggles.
2. Avoid smashing and burning of the module. Avoid storing and using the module in conditions where water, organic solvents or aggressive acids or bases may contact the module or where there is a possibility of exposure to corrosive gases, explosive gases, dust, salinity or other harsh conditions. The module should be disposed as special industrial waste.
3. Exceeding absolute maximal ratings even for a short time can cause permanent damage of the module.
4. The module is sensitive to and can be broken by ESD (static electricity).

## Conflict Minerals Policy Statement

LasersCom LLC achieves business objectives and customer needs with social responsibility. We do not support or contribute to the violence and human rights violations associated with the mining of conflict minerals coming from Conflict Regions according to US "Dodd-Frank Act". When possible, our suppliers' conflict mineral statements are reviewed. We do not directly purchase Conflict Minerals from any source and do not knowingly procure any parts and products containing Conflict Minerals from Conflict Regions.

## RoHS Compliance Statement

Restriction of Hazardous Substances (RoHS) directive (Directive 2011/65/EC amended with Directive (EU) 2015/863) is the directive aimed at reducing the harmful environmental impact of waste electrical equipment by restricting the use of known dangerous substances. Based on information received from our supply sources, LasersCom LLC hereby states that the banned substances listed in the RoHS directive are not found in the parts and materials used above the threshold level listed other than exceptions approved by the European Commission.

## REACH Compliance Statement

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is a European Union regulation 1907/2006/EC that addresses the production and use of chemical substances, and their potential impacts on human health and the environment. Based on information received from our supply sources, LasersCom LLC hereby states compliance of the parts and materials used in manufacturing to REACH regulation. LasersCom LLC does not manufacture or import any substances or preparations as defined under REACH.