## 1053 nm Laser diodes & Turn-key solutions



# Aero

www.aerodiode.com

## 1053 nm laser diode

## Choose your own fiber-coupled laser diode + turn-key driver solution

Standard singlemode or multimode laser diodes in the 1053 nm wavelength range are offered as stock items or combined with a CW or pulsed turn-key laser diode driver.

Diode model	Power (CW)	Power (Pulse)	Technology	Wavelength (nm) (Chip Temprature @ 15°c)	Fiber (or eq.)	Emisison Band- width (typ)	Package (mm)
1	120 mW	600 mW	Butterfly single mode	1053 ± 5 nm (1053 nm ± 1 nm with FBG option)	Hi 1060 PM 980 (option)	~1 nm (0.2 nm with FBG OPTION)	14 pin Butterfly- type 1
2	300 mW	1200 mW		1053 ± 5 nm (1053 nm ± 1 nm with FBG option)			

Ord Choose your product form factor : OPEN-FRAME or INTEGRATED

### **OPEN-FRAME VERSIONS:**

Choose your laser diode :



St



> Open-frame driver for «Shaper» electronic Board for single mode diodes



> «CCM» Open-frame driver for Multimode diodes



		LASER DRIVER VERSION :				
	1053 nm Laser Diode version	CW Driver (for singlemode diodes : « <u>CCS-CW</u> » is the open driver and <u>CCSI-CW</u> is the integrated version)	Pulse & CW Driver (from 1 ns to CW : « <u>CCS-std</u> » is the open driver and <u>CCSI-std</u> is the integrated version)	User design pulse shape Driver (« <u>Shaper</u> » open driver / « <u>Shaper-I</u> » inte- grated version) from 0.5 ns to 8 µs		
Output Power - CW / Pulse	1- Butterfly singlemode	120 mW / No	120 mW / 600 mW	No / 600 mW		
(Typical values)		300 mW / No	300 mW / 900 mW	No / 800 mW		
Laser diode T°		15 - 50 °C				
Pulse duration (Ext. trigger)			0.5 ns - CW			
Pulse duration (Internal pulse generator)			0.5 ns - 500 ns	0.5 ns - 8 µs		
Typ rise/fall time ; Min optical pulse duration (Butterfly package diodes)	Any	CW only	3 (ns/A) ; 1.5 ns	< 1ns/A; 1.5 ns		
Internal rep rate adjustment			1 Hz - 4 MHz (250 MHz optional)	1 Hz - 20 MHz		
Temporal Jitter			< 25 ps	<2 ns		
Interface/GUI/libraries		USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python				

### **INTEGRATED VERSIONS :**



diodes)

> Integrated version for CW, std and HP electronics Boards

> Open-frame driver for CCS-CW, CCS-std and CCS-HP electronics Boards for single mode diodes

## AeroDODE



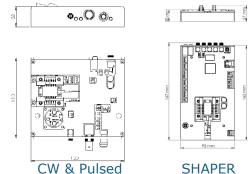
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## **Technical Specifications**





#### Mechanical (examples) :





SHAPER

#### OPTIONS (see all prices on the website page):

- \* PM fiber output
- \* Narrow spectrum (FBG-based)
- \* Optical collimator (3mm or high power 10 mm version)
- \* 250 MHz rep rate for pulse diode +driver versions

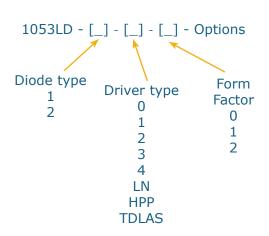
\* Special Benchtop version for lab use [see the description on the website page and the picture below)



#### **Classification**:

#### Name 1053LD : O: Laser diode only 1: 120 mW Butterfly singlemode Diode type 2: 300 mW Butterfly singlemode O: No driver (laser diode alone) 1: CCS/CCSI-CW (CW laser emission only - for singlemode laser diodes) **Driver Electro-**2: CCS-CCSI-std (Pulsed and CW Driver - for singlemode laser diodes) nics ' 3: SHAPER (User design temporal pulse shape - for singlemode laser diodes) O: No driver (laser diode alone) Form Factor 1: Open frame driver version 2: Integrated driver version

### Ordering information :



## AeroDODE



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#### CCM (for Multimode diodes)

