Single-mode Fiber Coupled Laser Source

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Return to the Webpage

Agiltron Fiber Pigtailed Laser Diode Modules feature low noise, high coupling efficiency and high reliability. They cover wide range of wavelength from VIS to IR with output power between a few mW to several ten mW. They provide the choice of single mode, multimode and polarization maintaining fibers.

Agiltron also provide customers design fiber pigtailed laser diode, including VCSEL and TO-CAN laser diode.

Features

- Compact
- Ultra-Stable
- Low Cost
- High Reliability
- High Efficiency

Applications

- R&D Applications
- Instrumentations
- Sensors

Specifications

Wavelength (nm)			Typical Power (mW)	Spectral Width (nm)	Laser Type
Minimum	Typical	Maximum			
395	405	415	20	1	FP
440	445	450	10	1	FP
630	633	635	10	1	FP
632	635	638	1	0.5	FP
650	660	670	10	1	FP
750	760	770	3	0.5	FP
770	775	780	10	1	FP
770	780	785	10	1	FP
800	810	820	10	2.5	FP
810	820	830	10	2.5	FP
840	850	860	20	2	FP
895	905	915	10	3	FP
945	950	965	3	3	FP
965	980	985	5	500kHz	FBG
1020	1030	1040	30	2.5	FP
1020	1030	1040	5	500kHz	FBG
1050	1060	1080	20	2.5	FP
1055	1060	1075	10	500kHz	FBG
1075	1080	1090	30	3	FP
1250	1255	1260	3	3	FP
1255	1270	1290	3	3	FP
1290	1300	1330	10	3	FP
1300	1300	1320	10	0.02	DFB
1385	1390	1395	10	10MHz	DFB
1480	1490	1500	3	1	FP
1530	1550	1560	5	2MHz	DFB
1530	1550	1570	10	4	FP
1560	1570	1585	10	7	FP
1590	1600	1620	20	10MHz	DFB
1615	1620	1635	4	7	FP

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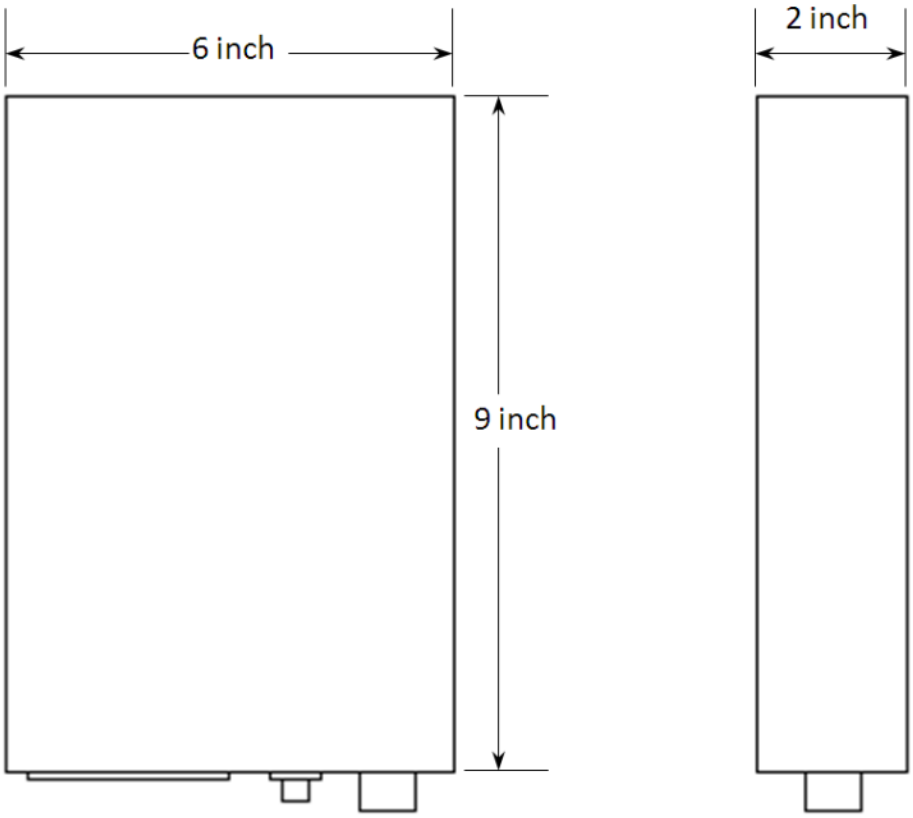
DATASHEET

Mechanical Dimension



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

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Ordering Information

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Prefix	**Package**	**Wavelength**	**Laser Type**	**Fiber Type**	**Optical Power**	**Connector**
PLSM-	Standard = 1 Special = 0	405 nm = 0405 445 nm = 0445 633 nm = 0633 635 nm = 0635 660 nm = 0660 775 nm = 0775 780 nm = 0780 810 nm = 0810 820 nm= 0820 850 nm = 0850 905 nm = 0905 950 nm = 0950 980 nm = 0980 1030 nm = 1030 1060 nm = 1060 1080 nm = 1080 1255 nm = 1255 1270 nm = 1270 1300 nm = 1300 1390 nm = 1390 1490 nm = 1490 1550 nm = 1550 1570 nm = 1570 1600 nm = 1600 1620 nm = 1620	Phase Grating = 1		< 5mW = 1 <10mW = 2 <20mW = 3 <30mW = 4 Special = 0	FC/PC = 1 FC/APC = 2 LC/PC = 3 ST = 4 SC = 5 SMA = 6 Special = 0

Application Notes

Fiber Core Alignment
Note that the minimum attenuation for these devices depends on excellent core-to-core alignment when the connectors are mated. This is crucial for shorter wavelengths with smaller fiber core diameters that can increase the loss of many decibels above the specification if they are not perfectly aligned. Different vendors' connectors may not mate well with each other, especially for angled APC.

Fiber Cleanliness
Fibers with smaller core diameters (<5 μm) must be kept extremely clean, contamination at fiber-fiber interfaces, combined with the high optical power density, can lead to significant optical damage. This type of damage usually requires re-polishing or replacement of the connector.

Maximum Optical Input Power
Due to their small fiber core diameters for short wavelength and high photon energies, the damage thresholds for device is substantially reduced than the common 1550nm fiber. To avoid damage to the exposed fiber end faces and internal components, the optical input power should never exceed 20 mW for wavelengths shorter 650nm. We produce a special version to increase the how handling by expanding the core side at the fiber ends.