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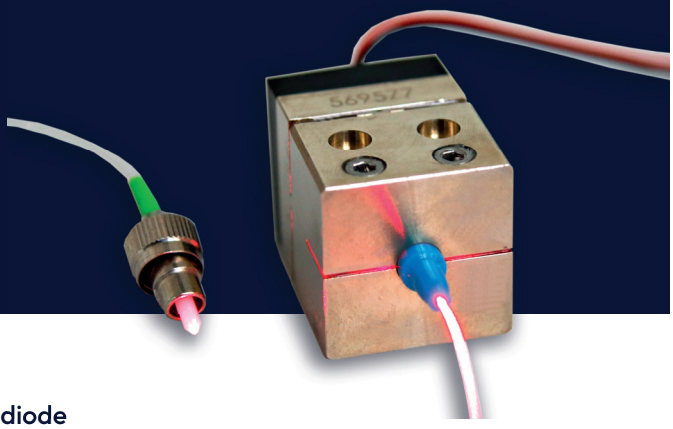
Singlemode Pigtail



Temperature stable singlemode fiber coupled laser diode

Passive cooled Singlemode Pigtail for application with high power stability requirements over a wide temperature range. The rugged and compact design is predestinated for applications in harsh environments like industry, medicine, geodesy and measurement systems.

FEATURES

- Output power stability over a wide temperature range
- Passive cooled – without TEC (thermo-electrical cooler)
- Robust against shock and vibration
- Compact design for integration in larger systems
- Various systems with a wide wavelength and power range available (see Matrix next page)
- High beam quality ex fiber (TEM00-Mode)

GENERAL SPECIFICATIONS

PARAMETER	VALUE	NOTE
Wavelengths	450 nm*, 515 nm, 635 nm, 640 nm, 655 nm, 660 nm, 785 nm, 830 nm, 850 nm	* under development
Output power (ex fiber)	from < 1 mW up to 40 mW	depending on laser diode - see matrix
Operating temperature	from -10°C to +50°C	
Storage temperature	from -20°C to +70°C	
Power stability	15 % (typ.)	evaluated for 635 nm and 515 nm Singlemode Pigtails over a range of -10°C to +50°C
Supply voltage	from 5 V to 9 V	depending on laser diode

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GENERAL SPECIFICATIONS

PARAMETER	VALUE	NOTE
Modulation via	linear voltage / PWM signal	analog / digital
Modulation modes	active high or active low	
Modulation frequency	0 - 10 kHz	depending on laser diode
Fiber connector	FC/APC (standard)	others on request
Fiber protection tubing	900 µm (standard)	others on request
Laser safety class	1 - 3B	depending on laser diode

MECHANICAL DIMENSIONS

PARAMETER	VALUE	NOTE
Housing dimensions	25.5 mm x 25.5 mm x 35 mm	
Fiber length	2 m (standard)	others on request
Electrical cable length	2 m	
Distance mounting holes	12 mm	2 x M3 screw
Distance mounting threads	10 mm	2 x M2.5 thread

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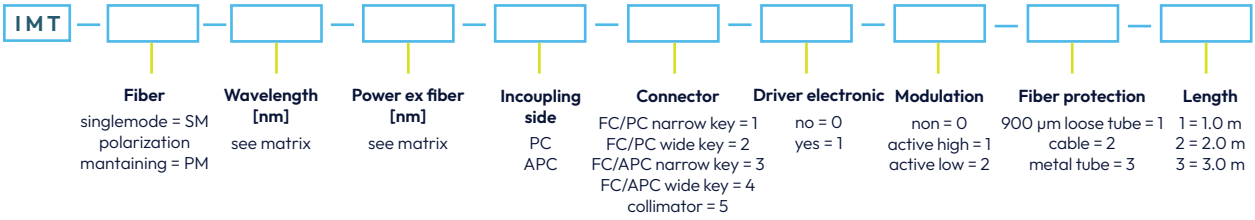
MATRIX

λ \ P (@ 25 °C, ex fiber)	1 mW	2 mW	5 mW	15 mW	20 mW	40 mW
515 nm	X	X		X		X
635 nm - 640 nm	X	X		X		
655 nm - 660 nm	X	X			X	
785 nm	X	X				X
830 nm				X		
850 nm	X	X	X			

ORDERING INFORMATION
PRODUCT



FOR EXAMPLE:

IMT-SM-635-1-PC-3-1-0-1-2.0

1430000743 IMT-Pigtail, SM @ 635 nm, 1 mW, incoupling side PC, connector FC/APC narrow key, driver electronic, non modulation, 900 µm LT, L = 2.0 m

NOTES

The above product specifications are subject to change without notice. Release 10/2024.

WE LOOK FORWARD
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