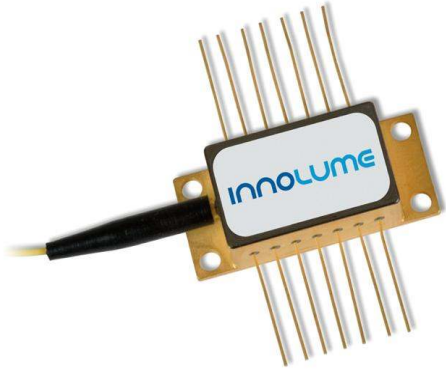


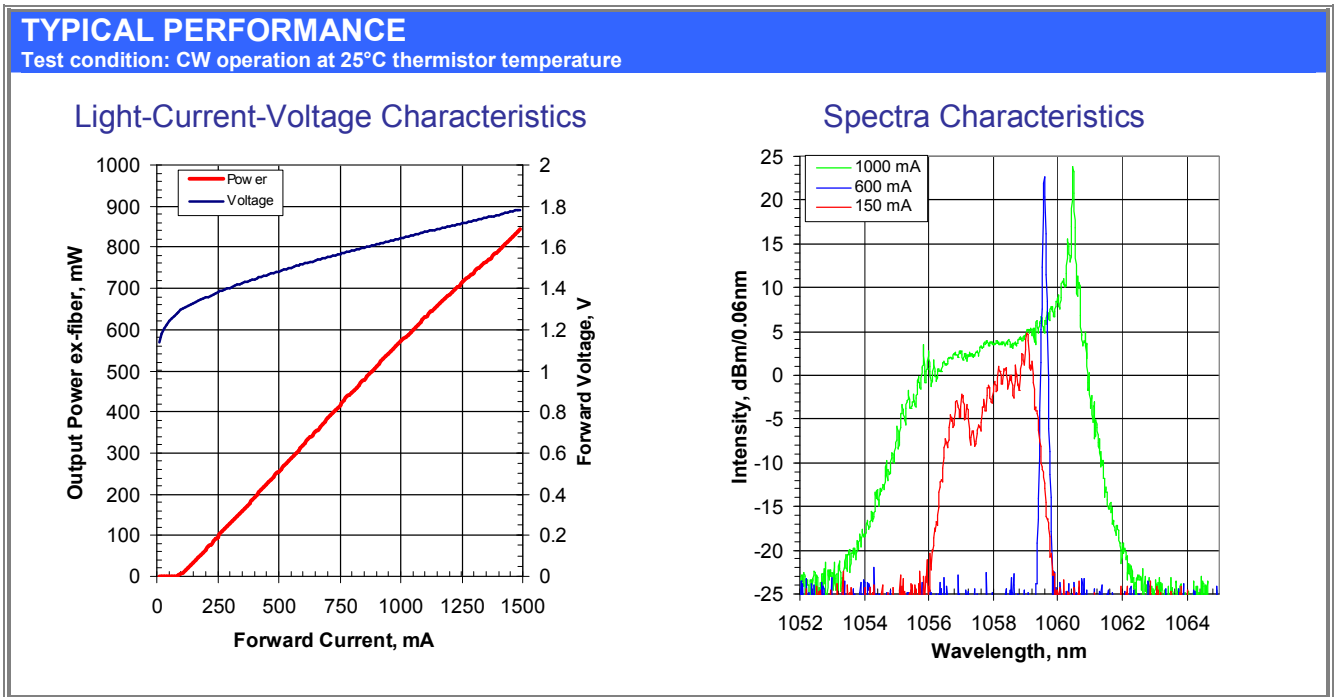
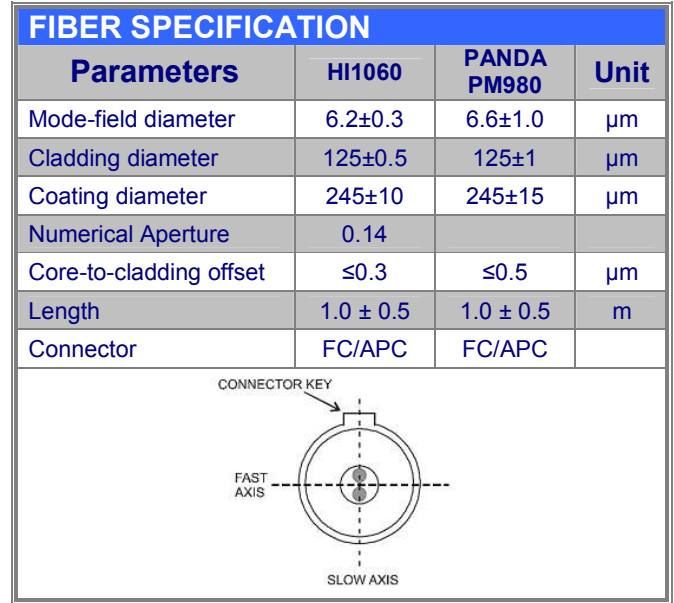
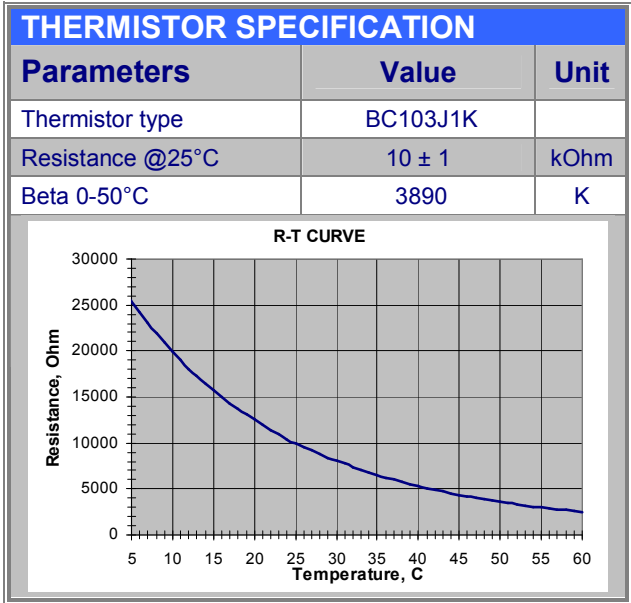
LD-1064-BF-600	
High Power Diode Laser – 600mW @1064nm in single mode fiber	
	<p>Features:</p> <ul style="list-style-type: none"> • Proprietary mirror coating technology enabling long life-time • CW or pulse (down to 2ns) operation • High reliable Au/Sn-technology • Optional: polarization maintaining fiber PM980 (PER>15dB) • Optional: monitor photodiode for power control <p>Applications:</p> <ul style="list-style-type: none"> • Seeding of fiber lasers • Instrumentation/measurement equipment • Defense
Specification	DATE: 5 th March. 2010

SPECIFICATIONS					
Test conditions: CW operation at P_{out} , thermistor temperature 25°C					
Parameters	Symb.	Min.	Typ.	Max.	Unit
Output power	P_{out}	600			mW
Mean wavelength at P_{out}	λ_P	1054	1064	1074	nm
Spectral width (FWHM)	$\Delta\lambda$		4	8	nm
Wavelength temperature tunability	$\Delta\lambda/\Delta T$	0.3	0.35	0.4	nm/°C
Threshold current	I_{th}		80	150	mA
Operating current	I_{op}		1000	1200	mA
Forward voltage	V_f		1.7	1.9	V
Polarization extinction ratio ¹	PER	15	17		dB
Monitor photodiode responsivity ²			0.1		$\mu A/mW$
Recommended operating temperature (on thermistor)	T_{op}	10	25	40	°C

¹ In the case of PM980 fiber option chosen.

² In the case of monitor photodiode option chosen.

ABSOLUTE MAXIMUM RATINGS			
Parameters	Min.	Max.	Unit
Laser Diode reverse voltage		2	V
Laser Diode CW forward current		$I_{op}+200$	mA
Thermo Electric Cooler current		3	A
Thermo Electric Cooler voltage		4	V
Fiber bend radius		3	cm
Storage temperature range (in original sealed pack)	5	80	°C
Case operating temperature range	5	50	°C



DIMENSIONS (All sizes in mm)

Pin identification:


1. TEC “+”
2. Thermistor
3. Monitor PD anode
4. Monitor PD cathode
5. Thermistor
- 6.
- 7.
- 8.
- 9.
10. Laser Diode anode “+”
11. Laser Diode cathode “-”
- 12.
13. Case
14. TEC “-”

SAFETY AND OPERATING INSTRUCTIONS

The laser light emitted from this device is invisible and will harmful to the human eye. Avoid looking directly into the output fiber or into the collimated beam along its optical axis when the device is in operation. Proper laser safety eyewear must be worn during operation.

Operating the device outside of its maximum ratings may cause device failure or a safety hazard. Power supplies used with the component must be employed such that the maximum peak optical power cannot be exceeded. A proper heatsink for the Laser Diode module is required. Exposure to maximum ratings for extended period of time or exposure above one or more max ratings may cause damage or affect the reliability of the device.

ESD PROTECTION – Electrostatic discharge is the primary cause of unexpected Laser Diode failure. Take extreme precaution to prevent ESD. Use wrist straps, grounded work surfaces and rigorous antistatic techniques when handling laser diodes.



LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION
 CLASS 4 LASER PRODUCT

CAUTION
 STATIC SENSITIVE DEVICE
 OBSERVE PRECAUTIONS

DANGER

VISIBLE AND/OR INVISIBLE LASER RADIATION
 AVOID EYE OR SKIN EXPOSURE TO
 DIRECT OR SCATTERED RADIATION

DIODE LASER
 MAX POWER 1W
 WAVELENGTH 1000 - 1400 nm
 CLASS IV LASER PRODUCT

NOTE: Innolume product specifications are subject to change without notice.