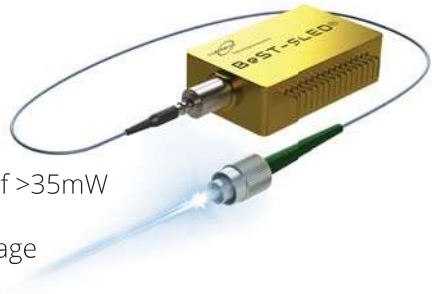
Product Brief - Multi SLED Platform

BeST-SLED® 1270nm-1500nm Tunable Superluminescent Diode

Model: OSM000106



Product Description

The Luxmux Broad Spectrum Tunable Superluminescent Diode (BeST-SLED®) platform, provides a wide spectrum, powerful light source with up to six SLEDs in an hermetically sealed butterfly package, manufactured in North America. Coupled to a single mode fibre with a standard FC/APC connector, the BeST-SLED® can be used in applications where wider spectrum, more power, and tunability is needed.

Our spectral stitching technology allows for complete independent control of all SLEDs. All SLEDS can be run from 0% to 100% of maximum rating. Each SLED comes with a built in independent monitor photodiode, and all SLEDs share a common thermoelectric cooler.

Coverage from 1270nm to 1500nm with output power of >35mW places the Luxmux BeST-SLED® as the most versatile and powerful SLED light source on the market.

Features

- FWHM >230nm
- Fiber output power of >35mW
- Single mode fiber
- 32-pin Butterfly Package
- FC/APC Connectors
- 5 Superluminescent Diodes in a single package
- Each SLED can be independently controlled

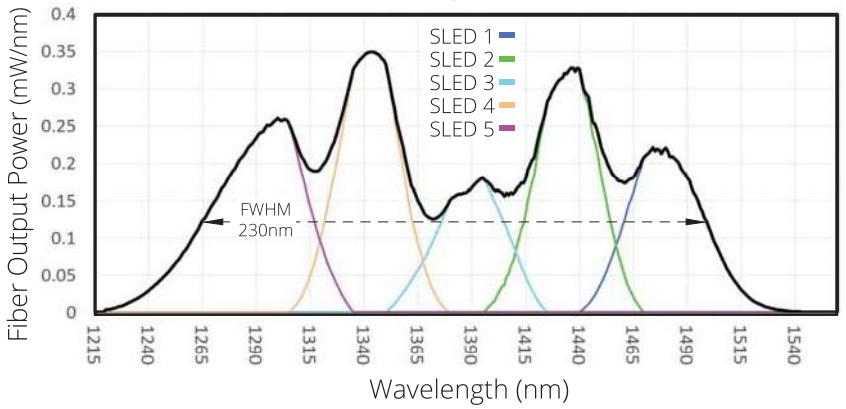
Advantages over other SLEDs

- A robust, compact butterfly package
- Much broader spectrum
- High output power
- Up to six SLEDs

Applications

- Fiber Optic Sensors
- Scientific & Research
- Optical Component Testing
- Telecom Test Equipment
- Optical Coherence Tomography
- Chromatic Dispersion Measurements
- Polarization Mode Dispersion Measurements

ASE Spectrum

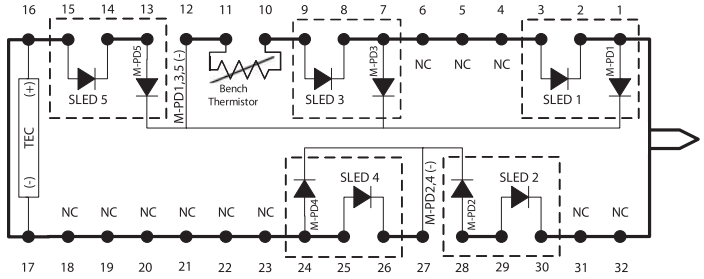


Typical Performance Characteristics

Key Specifications: 1270nm - 1500nm 5 SLED - OSM000106							
SLED No.	1	2	3	4	5	6	1+2+3+4+5
Central Wavelength (Typ.)	1480nm	1430nm	1390nm	1340nm	1300nm	--	1385nm
FWHM Bandwidth (Typ.)	40nm	34nm	38nm	34nm	49nm	--	230nm
10 dB Bandwidth (Typ.)	71nm	59nm	64nm	58nm	90nm	--	280nm
Fiber-Coupled Power	>7mW	>9mW	>5mW	>9mW	>9mW	--	>35mW

Package

Pin Assignment - Five SLED Best-SLED							
1	M-PD1 (+)	9	SLED 3 (+)	17	Tec (-)	25	SLED 4 (+)
2	SLED 1 (-)	10	Thermistor	18	--	26	SLED 4 (-)
3	SLED 1 (+)	11	Thermistor	19	--	27	M-PD2,4 (-)
4	--	12	M-PD1, 3, 5 (-)	20	--	28	M-PD2 (+)
5	--	13	M-PD5 (+)	21	--	29	SLED 2 (+)
6	--	14	SLED 5 (-)	22	--	30	SLED 2 (-)
7	M-PD3 (+)	15	SLED 5 (+)	23	--	31	--
8	SLED 3 (-)	16	Tec (+)	24	M-PD4 (+)	32	--



sales@luxmux.com
www.luxmux.com

Luxmux Technology Corporation
#120, 3510 29th Ave NE Calgary, AB
Canada T1Y 7E5 +1-403-474-4661

Product Brief - Multi SLED Platform

Driver for 32-Pin Butterfly Package

Models: DSM000031; DSM000032; DSM000033; DSM000034

The complete solution to control the BesT-SLED® . The driver has all the components required to control the multi SLED platform, including communications and up to 3 power meters, ready to go, right out of the box.

Product Description

The Luxmux driver, with an installed BeST-SLED®, is an all-in-one, ready to go, multi SLED platform with up to three optional power meters. Everything required for in dependant SLED current control, thermal management, communication, and user interface control is included in this plug-and-play package.

During development a fiber optic sensing application, we were searching for a tunable, high power, broad spectrum multi SLED platform. Unable to source one we developed this complete plug and play solution.

The Luxmux driver is an ideal platform for the multi SLED 32-Pin butterfly package. The driver includes everything needed for plug and play operation, communication, user interface, with up to 3 optional power meters.

Features

- 6 Independent SLED current control up to 0A to 1.2A
- 6 Independent monitor photodiode readouts for each SLED
- 6 Independent actual current readings for each SLED
- 6 Manual switches, to turn each SLED on or off
- USB or Ethernet communication
- PC software for full control and monitoring
- Custom API available.
- Temperature monitoring of heatsink and PCB
- TEC control of the 32-Pin butterfly package
- TEC control of the optional power meters
- Automatic fan control for optimal thermal management
- Compatible with all Luxmux 32-Pin butterfly packages

Driver Models

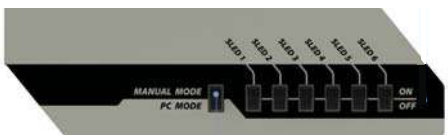
Model: DSM000031
No Power Meter

Model: DSM000032
1 Power Meters

Model: DSM000033
2 Power Meters

Model: DSM000034
3 Power Meters

Manual SLED Switch or PC Based Control



sales@luxmux.com
www.luxmux.com

Luxmux Technology Corporation
#120, 3510 29th Ave NE Calgary, AB
Canada T1Y 7E5 +1-403-474-4661