

14-PIN BUTTERFLY PACKAGE SLED

Product Brief

This solution is a superluminescent diode (SLED) that comes in a 14-pin butterfly package, and operates within the near-infrared region (NIR). It is a compact package that provides an integrated optical interface and one of the highest power densities within the SLED technology industry.

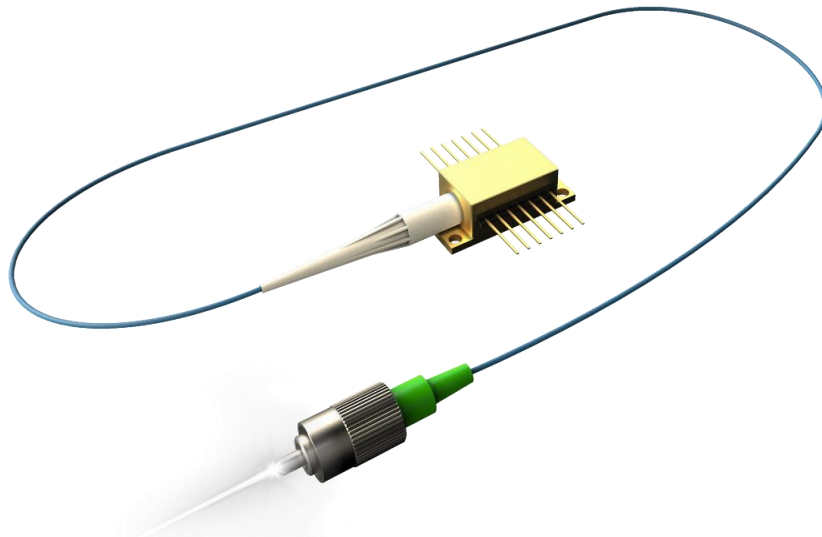
This package offers spectral coverage between 1270nm and 1705nm, with minimum optical power between 6mW and 30mW. The temperature of the device is regulated by an integrated thermoelectric cooler (TEC). This light source is robust and easy-to-use, making it an appropriate fit for many different types of manufactured assemblies requiring light power, including the applications below:

KEY FEATURES

- SLED can be run from 0 – 100% of maximum rating
- Output power: 6mW – 30mW
- Bandwidth FWHM: 35nm – 70nm
- Light output: FC/APC Connector (Optional: FC/PC or SMA)
- SLED comes with a built-in independent monitor photodiode and one thermoelectric cooler (TEC)

APPLICATIONS

- Optical Component Testing
- Telecom Test Equipment
- Medical Optical Coherence Tomography
- Industrial Optical Coherence Tomography
- Metrology
- Fiber Optic Gyroscopes
- Biomedical Imaging Systems
- Optical Sensing
- White Light Interferometry
- Research and Development



KEY MEASUREMENTS

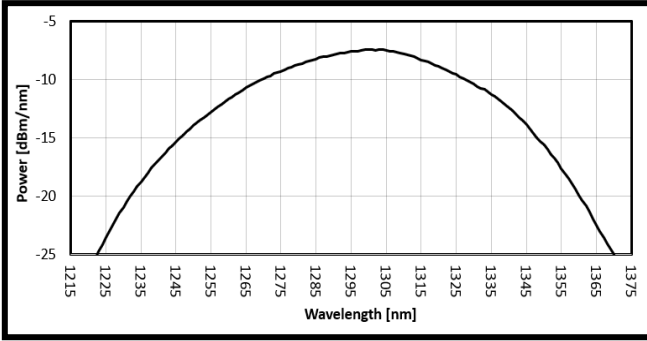
Part Number	SLED	Spectral Coverage (SC)	Full-Width Half-Maximum (FWHM)	Center Wavelength (CW)	Light Output Power (LOP)
ASMXX2XX1	1300nm	1270nm – 1330nm	60nm	1300nm	12mW
ASMXX2XX2	1340nm	1310nm – 1370nm	60nm	1340nm	12mW
ASMXX2XX3	1390nm	1360nm – 1420nm	60nm	1390nm	10mW
ASMXX2XX4	1430nm	1410nm – 1450nm	40nm	1430nm	10mW
ASMXX2XX5	1480nm	1455nm – 1505nm	50nm	1480nm	13mW
ASMXX2XX6	1550nm	1515nm – 1585nm	70nm	1550nm	15mW
ASMXX2XX7	1615nm	1585nm – 1645nm	60nm	1615nm	6mW
ASMXX2XX8	1680nm	1655nm – 1705nm	50nm	1680nm	13mW
ASMXX2XX9	1550nm	1500nm – 1600nm	70nm	1550nm	8mW
ASMXX2X12	1550nm	1532nm – 1568nm	35nm	1550nm	30mW

Additional Information:

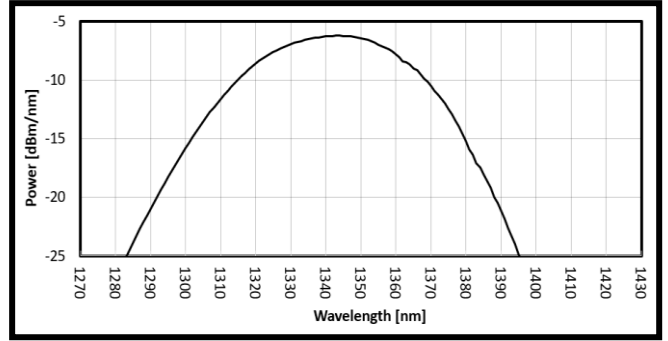
XXX (e.g., ASMXXX01) has been used as a placeholder for this table. For a full ordering code for each specific product, see ORDERING CODE table below.

TYPICAL SPECTRUMS – FIBER COUPLED MODELS

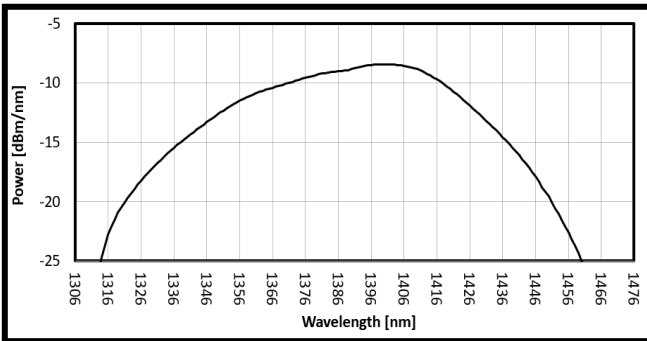
ASMXX2X01



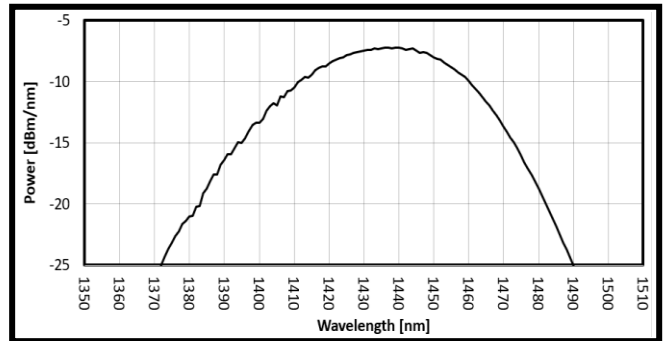
ASMXX2X02



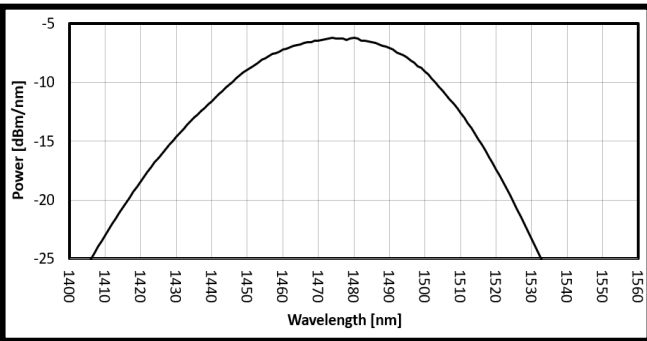
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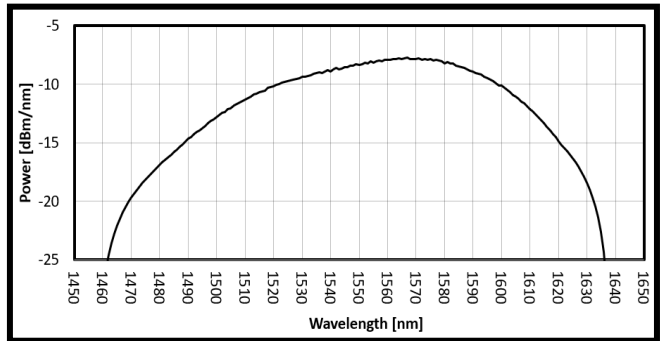
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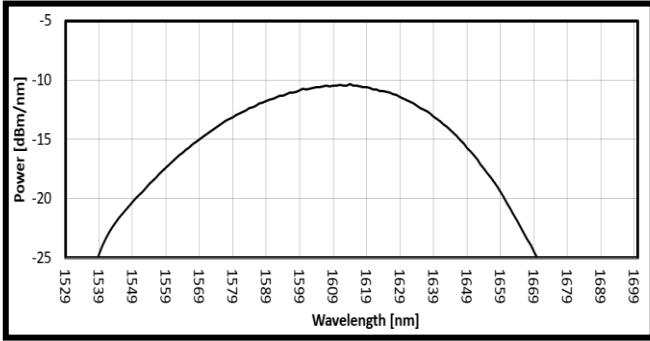
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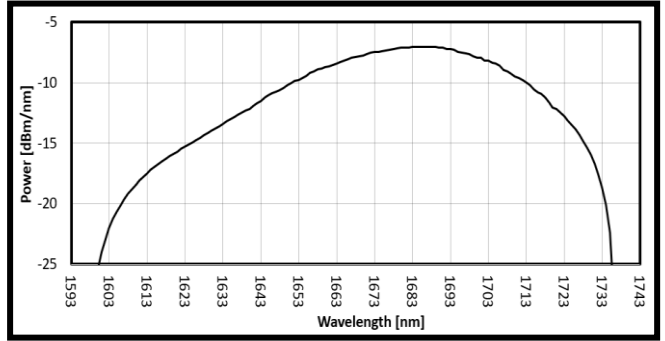
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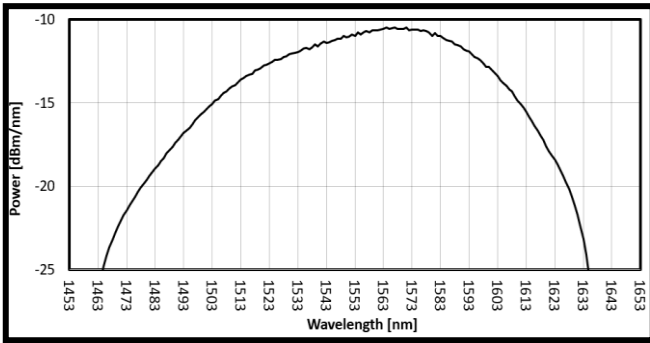
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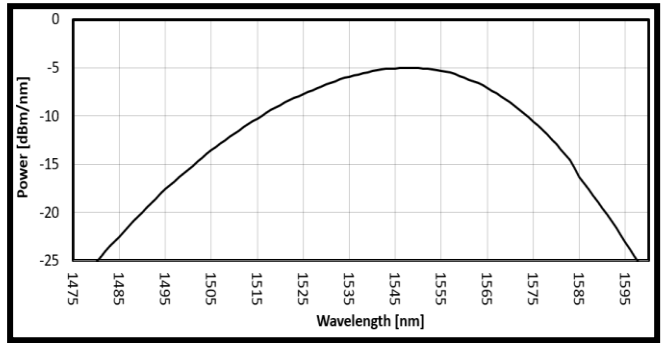
ASMXX2X08



ASMXX2X09

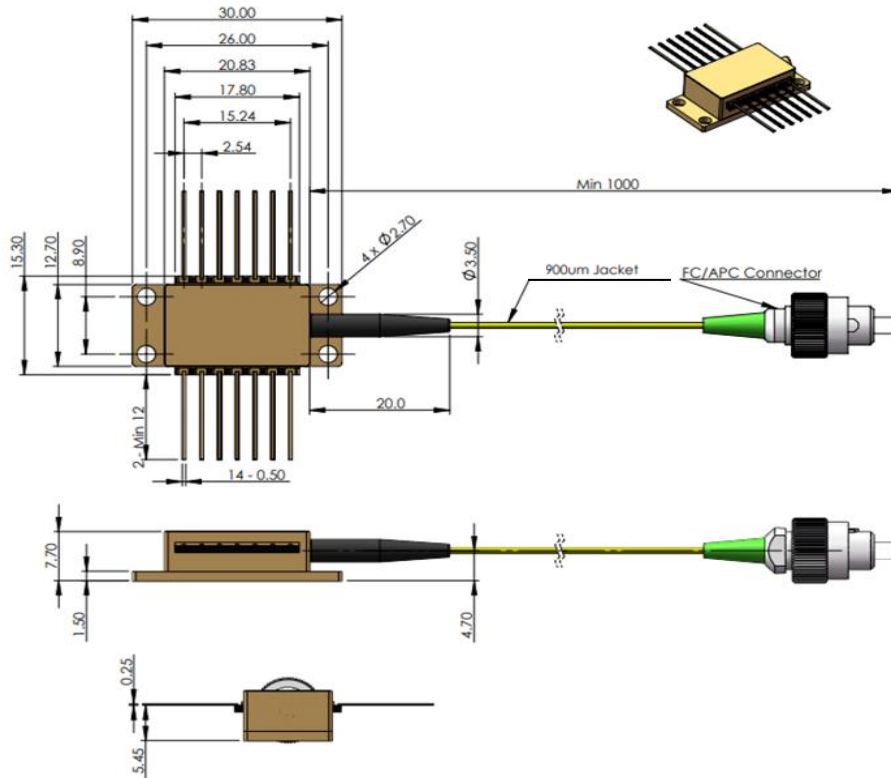


ASMXX2X12



DIMENSIONS

Fiber: PM-1300XP



Polarization Maintaining (PM) Models			Single Mode (SM) Models		
Part	SLEDs	Description	Part	SLEDs	Description
Package Type	ALL	14-Pin Butterfly	Package Type	ALL	14-Pin Butterfly
Fiber	1300nm, 1340nm, 1390nm, 1430nm, 1480nm	PM-1300XP	Fiber	ALL	smf-28e
	1550nm, 1615nm, 1680nm	PM-1550XP		1300nm	9.2 μm
Core Diameter	1300nm, 1340nm, 1390nm, 1430nm, 1480nm	8 μm		1340nm	9.4 μm
	1550nm, 1615nm, 1680nm	8.5 μm		1390nm	9.6 μm
Jacket	ALL	900 μm loose tube		1430nm	9.8 μm
Fiber pigtail length	ALL	1m		1480nm	10 μm
Fiber bending radius	ALL	>40mm		1550nm	10.4 μm
				1615nm	10.6 μm
				1680nm	10.9 μm
Connector	ALL	FC/APC	Jacket	ALL	900 μm loose tube
Dimensions	ALL	See figure	Fiber pigtail length	ALL	1m
			Fiber bending radius	ALL	>40mm
			Connector	ALL	FC/APC
			Dimensions	ALL	See figure

ORDERING CODE

ORDERING CODE:		BTF	SLEDs	FT	DOP	SC	FWHM	CW	LOP
BTF	14-Pin Butterfly Package SLED								
SLEDs	SLED center wavelength, choose one of the following models: 1300nm, 1340nm, 1390nm, 1430nm, 1480nm, 1550nm, 1615nm, 1680nm								
FT	Fiber Type, choose 1: PM: Polarization Maintaining SM: Single Mode								
DOP	Degree of Polarization HP: High Degree of Polarization								
SC	Spectral Coverage [nm]								
FWHM	Full Width Half Maximum [nm] [FWHM defined as the bandwidth from the lowest spectral dip]								
CW	Center Wavelength [nm]								
LOP	Light Output Power [mW]								

 Product Code
 Available Options
 Taken From Table

Part Number	Ordering Code: LTC-OSE1-(SLED)-(FT)-(DOP)-(SC)-(FWHM)-(CW)-(LOP)	SLED [nm]	FT	SC [nm]	FWHM [nm]	CW [nm]	LOP [mW]
ASM002001	BTF-1300-PM-HP-1270_1330-60-1300-12	1300	PM	1270-1330	60	1300	12
ASM002002	BTF-1340-PM-HP-1310_1370-60-1340-12	1340	PM	1310-1370	60	1340	12
ASM002003	BTF-1390-PM-HP-1360_1420-60-1390-10	1390	PM	1360-1420	60	1390	10
ASM002004	BTF-1430-PM-HP-1410_1450-40-1430-10	1430	PM	1410-1450	40	1430	10
ASM002005	BTF-1480-PM-HP-1455_1505-50-1480-13	1480	PM	1455-1505	50	1480	13
ASM002006	BTF-1550-PM-HP-1515_1585-70-1550-15	1550	PM	1515-1585	70	1550	15
ASM002007	BTF-1615-PM-HP-1585_1645-60-1615-6	1615	PM	1585-1645	60	1615	6
ASM002008	BTF-1680-PM-HP-1655_1705-50-1680-13	1680	PM	1655-1705	50	1680	13
ASM002009	BTF-1550-PM-HP-1500_1600-70-1550-8	1550	PM	1500-1600	70	1550	8
ASM002012	BTF-1550-PM-HP-1532_1568-35-1550-30	1550	PM	1532-1568	35	1550	30

Part Number	Ordering Code: LTC-OSE1-(SLED)-(FT)-(DOP)-(SC)-(FWHM)-(CW)-(LOP)	SLED [nm]	FT	SC [nm]	FWHM [nm]	CW [nm]	LOP [mW]
ASM002101	BTF-1300-SM-HP-1270_1330-60-1300-12	1300	SM	1270-1330	60	1300	12
ASM002102	BTF-1340-SM-HP-1310_1370-60-1340-12	1340	SM	1310-1370	60	1340	12
ASM002103	BTF-1390-SM-HP-1360_1420-60-1390-10	1390	SM	1360-1420	60	1390	10
ASM002104	BTF-1430-SM-HP-1410_1450-40-1430-10	1430	SM	1410-1450	40	1430	10
ASM002105	BTF-1480-SM-HP-1455_1505-50-1480-13	1480	SM	1455-1505	50	1480	13
ASM002106	BTF-1550-SM-HP-1515_1585-70-1550-15	1550	SM	1515-1585	70	1550	15
ASM002107	BTF-1615-SM-HP-1585_1645-60-1615-6	1615	SM	1585-1645	60	1615	6
ASM002108	BTF-1680-SM-HP-1655_1705-50-1680-13	1680	SM	1655-1705	50	1680	13
ASM002109	BTF-1550-SM-HP-1500_1600-70-1550-8	1550	SM	1500-1600	70	1550	8
ASM002112	BTF-1550-SM-HP-1532_1568-35-1550-30	1550	SM	1532-1568	35	1550	30