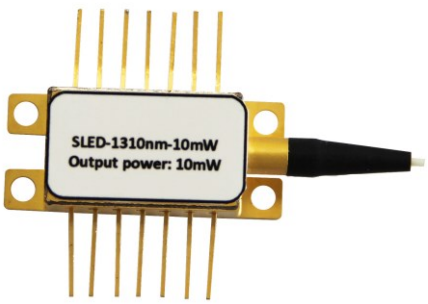
Broadband SLED at
830/1060/1310/1450/1550/1600/1650nm Bands & 2000nm Bands: SLED



2022 V1

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Broadband SLED at 830/1060/1310/1450/1550/1600/1650nm Bands: SLED

The Superluminescent Light Emitting Diode Broadband Light Sources are designed with a high-performance SLED chip and the TEC control units as well as an optical isolator inside. This light source is packaged by the 14-pin butterfly or 8-pin butterfly, it provides stable output power with different level from 1 mW to 10 mW, and also output a good performance source at different center wavelength as 830/1060/1310/1450/1550/1610/1650nm, we have the options of output fiber as single mode fiber and polarizer mode fiber or other customer specified fiber type, the device can also output with FC, LC, SC or other customer specified connector. The products are Telcordia GR-468 qualified and in compliance with RoHS requirements.

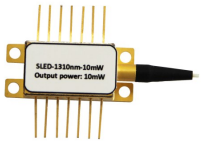
Applications

- Fiberoptic communications system
- Fiberoptic gyroscopes
- Fiberoptic sensors
- Fiberoptical coherence tomography
- Fiberoptical test instruments
- Biomedical imaging systems

Features

- λ of 830,980, 1060, 1310,1450,1550, 1600,1650nm
- Low Spectral ripple, Broad bandwidth
- Industry-standard,14-pin butterfly package
- Built-in TEC and optical isolator
- Low polarization sensitivity

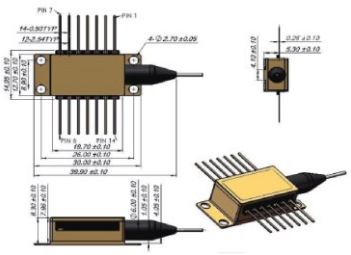
Product Photo



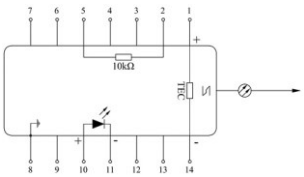
Optical and Electric Specifications

Parameter	Symbol	Min.	Typ-	Max.	Unit
Optical Output Power	Po	10		-	mW
Center Wavelength (830/1060/1310/1450/1550/1600/1650nm)	λ_c	λ_c -20	-	λ_c +20	nm
Full Width at Half Maximum	FWHM	-	40	-	nm
Spectral Ripple	-	-	-	0.3	dB
Optical Isolation (λn=1310/1450/1550/1600/1650nm)	ISO	30	-	-	dB
Forward Current	I_F	-	350	600	mA
Threshold Current	I_{TH}	-	80	-	mA
Laser Forward Voltage	V_F	-	2.5	3	V
Laser Reverse Voltage	V_R	-	-	2	V
TEC set temperature	T_S	15	-	35	°C
Thermistor Current	I_{TC}	10	-	100	μA
Thermistor Resistance@25°C	R_{TH}	9.5	-	10.5	kΩ
TEC Current	I_{TEC}	-	0.8	1.5	A
TEC Voltage	V_{TEC}	-	1.3	3.5	V
Operating Temperature	T	-5	-	70	°c
Storage Temperature	T	-40	-	85	°c
Note: λn=830nm,1060nm, 1310nm, 1450nm,1550nm,1600nm,1650nm					

Mechanical Dimensions



PIN Definition



Ordering Information

SLED-	□ □	□	□	□	□	□	□	□
	Wavelength	Polarization Type	Package	Power	Fiber type	Pigtail Type	Fiber length	Connector
	83: 830nm	1 Tow Polarisation	1: 14-PIN	01: ImW	0: SMF-28e	0: 250pm bare fiber	1:50cm	0:None
	06:1060nm	2:Single Polarization	2: 8-PIN	02: 2mW	LPMF-1310	1:900pm loose tube	2:100cm	LFC/UPC
	31:1310nm			10: lOmW	2:PMF-1550	2:900pm tight tube	3:150cm	2:FC/APC
SLED-	45:1450nm			20: 20mW	C: Customized	C: Customized	4:200cm	3:SC/UPC
	55:1550nm						C: Customized	4:SC/APC
	60:1600nm							5:LC/UPC
	65:1650nm							6:LC/APC
								C: Customized
Example of Ordering Form: SLED-3121100222-01								
SLED-	31	2	1	10	0	2	2	2
	1310nm	Single Polarization	14-PIN	lOmW	SMF-28e	900pm tight tube	100cm	FC/APC

Broadband SLED Module at 2000nm Bands: SLED

The Superluminescent Light Emitting Diode Broadband Light Sources are designed with a high-performance SLED chip and the TEC control units as well as an optical isolator inside. This light source is packaged by the 14-pin butterfly or 8-pin butterfly, it provides stable output power with different level from 1 mW to 10 mW, and also output a good performance source at 2000nm, we have the options of output fiber as single mode fiber and polarizer mode fiber or other customer specified fiber type, the device can also output with FC, LC, SC or other customer specified connector. The products are Telcordia GR-468 qualified and in compliance with RoHS requirements.

Applications

- Fiberoptic communications system
- Fiberoptic gyroscopes
- Fiberoptic sensors
- Fiberoptical coherence tomography
- Fiberoptical test instruments
- Biomedical imaging systems

Features

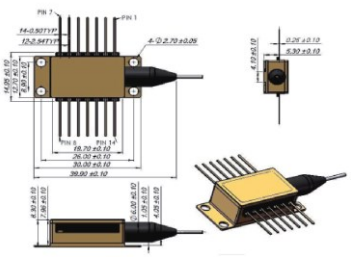
- λ of 2000nm
- Low Spectral ripple, Broad bandwidth
- Built-in TEC and optical isolator
- Low polarization sensitivity
- Industry-standard, 14-pin butterfly package

Product Photo

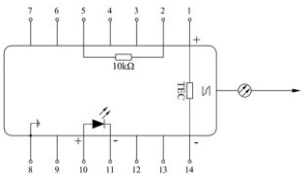
Optical and Electric Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Optical Output Power	Po	10	-	-	mW
Center Wavelength	λ_c	1980	2000	2020	nm
Full Width at Half Maximum	FWHM	-	40	-	nm
Spectral Ripple	-	-	-	0.3	dB
Optical Isolation	ISO	30	-	-	dB
Forward current	L	-	350	600	mA
Threshold Current	Ith	-	80	-	mA
Laser Forward Voltage	V_F	-	2.5	3	V
Laser Reverse Voltage	V_R	-	-	2	V
TEC set temperature	T_S	15	-	35	°C
Thermistor Current	I_{TC}	10	-	100	μA
Thermistor Resistance	R_{TH}	9.5	-	10.5	KΩ
TEC Current	I_{TEC}	-	0.8	1.5	A
TEC Voltage	V_{TEC}	-	1.3	3.5	V
Operating Temperature	T	-5	-	70	°C
Storage Temperature	T	-40	-	85	°C
Note: λn=2000nm					

Mechanical Dimensions



PIN Definition



Ordering Information

SLED-	□ □	□	□	□ □	□	□	□	□
	Wavelength	Polarization Type	Package	Power	Fiber type	Pigtail Type	Fiber length	Connector
	20:2000nm	1:Low Polarisation	1: 14-PIN	01: 1mW	0: SMF-28e	0: 250μm bare fiber	1:50cm	0:None
		2:Single Polarization	2: 8-PIN	02: 2mW	1:PMF-1310	1:900μm loose tube	2:100cm	1:FC/UPC
SLED-				10: 10mW	2:PMF-1550	2:900μm tight tube	3:150cm	2:FC/APC
				20: 20mW	C: Customized	C: Customized	4:200cm	3:SC/UPC
							C Customized	4:SC/APC
								5:LC/UPC
								6:LC/APC
								C:Customized
Example of Ordering Form: SLED-2021100222-01								
SLED-	20	2	1	10	0	2	2	2
	2000nm	Single Polarization	14-PIN	10mW	SMF-28e	900μm tight tube	100cm	FC/APC

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