



Super-Luminescent Light Emitting Diode Device

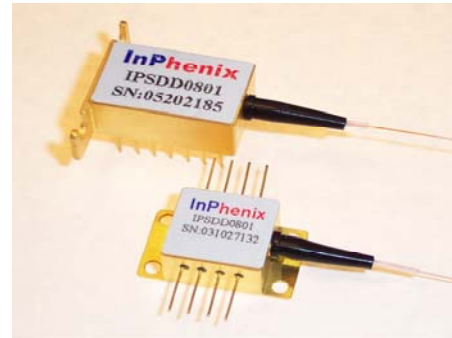
IPSDD080X (820nm)

Features

- Wide Optical Bandwidth
- Very Low Spectral Ripple
- High Output Power in SM/or PM Fiber

Applications

- Broadband Light Source
- Fiber Optic Sensor (FOS)
- Biomedical Imaging Device
- Optical Coherence Tomography (OCT)



IPSDD0801 – FOS-type SLED Device Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_p	805	820	830	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	15			nm
Output Power in SM Fiber	P_o	0.3			mW
Spectral Modulation Depth p-p	Δ			4	%
				0.17	dB
Operating Current	I_F		120		mA
Back Facet Monitor	Available upon request				

IPSDD0802 – OCT-type SLED Device Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_p	805	820	830	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	22	25		nm
Output Power in SM Fiber	P_o	2.0	2.5		mW
Spectral Modulation Depth p-p	Δ			4	%
				0.17	dB
Operating Current	I_F			160	mA
Back Facet Monitor	Available upon request				



IPSDD0803 – OCT-type SLED Device Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_p	805	820	830	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	40			nm
Output Power in SM Fiber	P_o	4.0	5.0		mW
Spectral Modulation Depth p-p	Δ			4	%
				0.17	dB
Operating Current	I_F		200	220	mA
Back Facet Monitor	Available upon request				

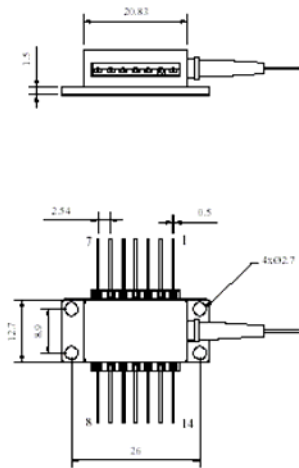
Standard 14-pin BUT package

Absolute Maximum Ratings

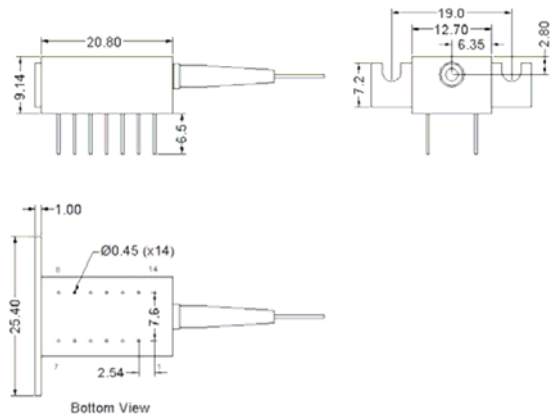
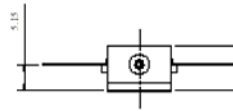
Parameter	Min.	Max.	Unit
Operating Temperature	-20	70	°C
Storage Temperature	-40	85	°C
TEC Drive Current		1.5	A
TEC Drive Voltage		3.6	V
Thermistor Resistance	10 k Ω @ 25 °C		
SLED Chip Temperature Setting	25 °C		
Fiber Type	SM800 or HI780		
Fiber Jacket	250 μ m tight buffer with 900 μ m loose tube		
Package	14-pin DIL/8-Pin BUT		



Package Dimensions



14-Pin BUT Package



14-Pin DIL Package

Dimensions in mm
Tol: ±0.13

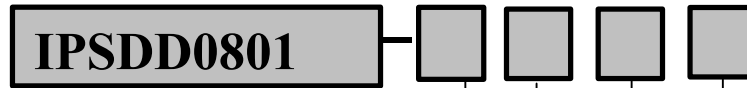
Pin Definition

14-pin BUT package				14-pin DIL package			
Pin	Function	Pin	Function	Pin	Function	Pin	Function
1	TEC(+)	8	NC	1	TEC(+)	8	NC
2	Thermistor	9	NC	2	NC	9	SLD (-)
3	NC	10	SLD (+)	3	NC	10	Case
4	NC	11	SLD (-)	4	NC	11	Thermistor
5	Thermistor	12	NC	5	SLD (+)	12	Thermistor
6	NC	13	Case	6	NC	13	NC
7	NC	14	TEC(-)	7	NC	14	TEC(-)

- If the SLD is ordered with a Back Facet Monitor, Pin 7 is PD-Cathode and Pin 8 is PD-Anode

INPHENIX

Part Numbering System



Model-

IPSSDD0801: 820nm FOS-type SLED Device
IPSSDD0802: 820nm OCT-type SLED Device
IPSSDD0803: 820nm OCT-type SLED Device

Package-

1: 14-pin DIL
2: 8-pin Butterfly
3: 14-pin Butterfly

Fiber Type:

1- SM Fiber
2- PM Fiber

Jacket Type:

1- 900 μ m
2- 250 μ m tight buffer

Connector Type:

0=No Connectors	5=N/A
1=N/A	6=N/A
2=N/a	7=SC/APC
3=FC/APC	8=SC/UPC
4=FC/UPC	9=N/A

Back Facet Monitor:

Available upon request

Example: IPSSDD0801-1224: 820 nm FOS-type SLED in 14-pin DIL with 250 μ m tight buffered PM fiber with FC/UPC connectors

Corporate Office

250 North Mines Rd
Livermore, CA 94551
Tel: 925.606.8809
Fax: 925.606.8810
www.inphenix.com
sales@inphenix.com