



## Super-Luminescent Light Emitting Diode Device

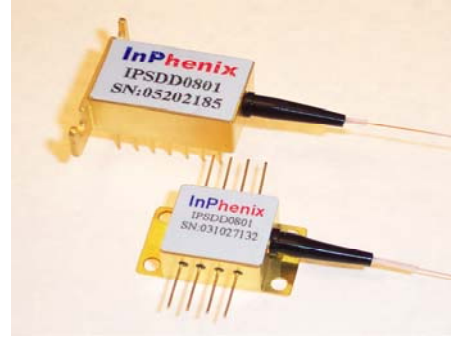
IPSDD080X (840nm)

### 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)



### IPSDD0804

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	830	840	845	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$		35		nm
Output Power in SM Fiber	$P_o$		5		mW
Spectral Modulation Depth p-p	$\Delta$			4.5	%
				0.2	dB
Operating Current	$I_F$		200		mA
Back Facet Monitor	Available upon request				

### IPSDD0807

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	830	840	845	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$		45		nm
Output Power in SM Fiber	$P_o$		8		mW
Spectral Modulation Depth p-p	$\Delta$			4.5	%
				0.2	dB
Operating Current	$I_F$		300		mA
Back Facet Monitor	Available upon request				



## IPSDD0808

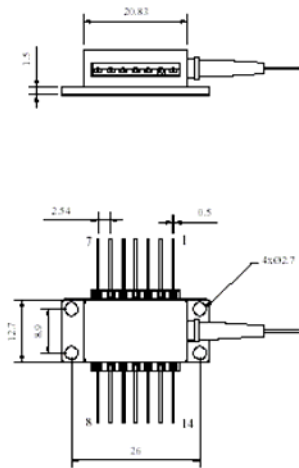
Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	830	840	845	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$		45		nm
Output Power in SM Fiber	$P_o$		11		mW
Spectral Modulation Depth p-p	$\Delta$			4.5	%
				0.2	dB
Operating Current	$I_F$		350		mA
Back Facet Monitor	Available upon request				

## Absolute Maximum Ratings

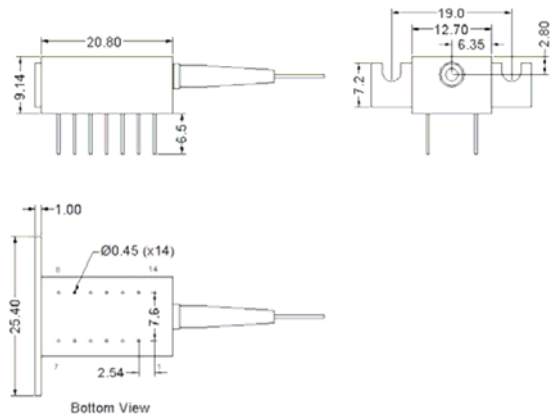
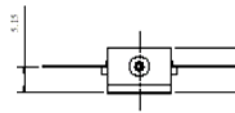
Parameter	Min.	Max.	Unit
Operating Temperature	-20	70	°C
Storage Temperature	-40	85	°C
TEC Drive Current		1.5	A
TEC Drive Voltage		3.6	V
Thermistor Resistance	10 k $\Omega$ @ 25 °C		
SLED Chip Temperature Setting	25 °C		
Fiber Type	SM800 or HI780		
Fiber Jacket	250 $\mu$ m tight buffer with 900 $\mu$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



**Package Dimensions**



**14-Pin BUT Package**



**14-Pin DIL Package**

Dimensions in mm  
Tol: ±0.13

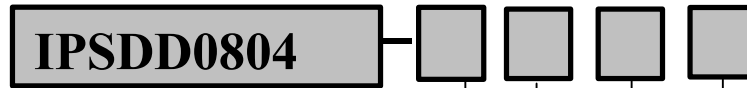
**Pin Definition**

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-**

IPSDD0804: 840nm OCT-type SLED Device  
IPSDD0807: 840nm OCT-type SLED Device  
IPSDD0808: 840nm 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  $\mu$ m  
2- 250  $\mu$ 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:** IPSDD0807-1224: 840 nm OCT-type SLED in 14-pin DIL with 250  $\mu$ m tight buffered PM fiber with FC/UPC connectors

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