

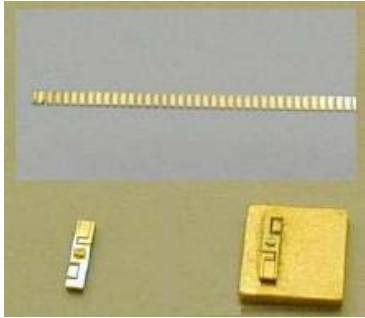
# INPHENIX

## Super-Luminescent Light Emitting Diode Chip

IPSDC130X / IPSDC150X (1310nm/1550nm)

### Feature

- 1310 nm and 1550 nm Wavelengths
- Wide Optical Bandwidth
- Very Low Ripple
- High Output Power
- Available as Chip, Chip on Carrier, and Chip on Submount



### Applications

- Biomedical Imaging Device
- Optical Test Instrument
- Fiber Optical Sensor (FOS)
- Optical Coherence Tomography (OCT)

### IPSDC1301 FOS-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1280		1360	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	40	45		nm
Output Power in Chip	$P_o$	1.0	2.5		mW
Spectral Ripple:	$\Delta$		0.1	0.2	dB
Operating Current	$I_F$			150	mA
Far Field	Available upon request				

### IPSDC1302 OCT-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C) (Preliminary)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1280		1360	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	40	45		nm
Output Power in Chip	$P_o$	35	40		mW
Spectral Ripple:	$\Delta$		0.2	0.5	dB
Operating Current	$I_F$		450		mA
Far Field	Available upon request				

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**IPSDC1303 OCT-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C) (Preliminary)**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1280		1360	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	50	55		nm
Output Power in Chip	$P_o$	10	15		mW
Spectral Ripple:	$\Delta$		0.2	0.3	dB
Operating Current	$I_F$			400	mA
Far Field	Available upon request				

**IPSDC1304 OCT-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C) (Preliminary)**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1280		1360	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	50	55		nm
Output Power in Chip	$P_o$		35		mW
Spectral Ripple:	$\Delta$		0.2	0.5	dB
Operating Current	$I_F$		450		mA
Far Field	Available upon request				

**IPSDC1305 OCT-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C) (Preliminary)**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1280		1360	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	55			nm
Output Power in Chip	$P_o$	35			mW
Spectral Ripple:	$\Delta$		0.2	0.5	dB
Operating Current	$I_F$			600	mA
Far Field	Available upon request				

**IPSDC1501 FOS-type SLED Chip Specifications@ (T<sub>chip</sub>=25°C) (Preliminary)**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1520		1590	nm
3 dB Bandwidth	$\Delta\lambda_{3dB}$	50	55		nm
Output Power in Chip	$P_o$	0.8	1.2		mW
Spectral Ripple:	$\Delta$		0.1	0.2	dB
Operating Current	$I_F$			150	mA
Far Field	Available upon request				

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## IPSDC1502 FOS-type SLED Chip Specifications@ ( $T_{\text{chip}}=25^{\circ}\text{C}$ ) (Preliminary)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1520		1590	nm
3 dB Bandwidth	$\Delta\lambda_{3\text{dB}}$	50	55		nm
Output Power in Chip	$P_o$	10	12		mW
Spectral Ripple:	$\Delta$		0.2	0.3	dB
Operating Current	$I_F$		350		mA
Far Field	Available upon request				

## IPSDC1503 FOS-type SLED Chip Specifications@ ( $T_{\text{chip}}=25^{\circ}\text{C}$ ) (Preliminary)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	$\lambda_p$	1520		1590	nm
3 dB Bandwidth	$\Delta\lambda_{3\text{dB}}$	55	60		nm
Output Power in Chip	$P_o$	5	6		mW
Spectral Ripple:	$\Delta$		0.2	0.3	dB
Operating Current	$I_F$		250		mA
Far Field	Available upon request				

### Part Numbering Structure

IPSDC1301

#### Model-

IPSDC1301: 1310 nm FOS-type SLED chip

IPSDC1302: 1310 nm OCT-type SLED chip

IPSDC1501: 1550 nm SLED chip

#### Assembly Options:

- Bare Chip
- Chip On Carrier
- Chip On Submount

Example: IPSDC1301: 1310 nm FOS-type SLED chip.

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