

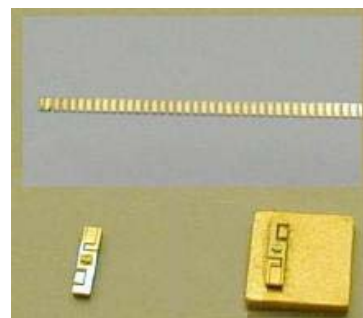
INPHENIX

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_{chip}=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_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:	Δ		0.1	0.2	dB
Operating Current	I_F			150	mA
Far Field	Available upon request				

IPSDC1302 OCT-type SLED Chip Specifications@ (T_{chip}=25°C) (Preliminary)

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


IPSDC1303 OCT-type SLED Chip Specifications@ (T_{chip}=25°C) (Preliminary)

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

IPSDC1304 OCT-type SLED Chip Specifications@ (T_{chip}=25°C) (Preliminary)

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

IPSDC1305 OCT-type SLED Chip Specifications@ (T_{chip}=25°C) (Preliminary)

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

IPSDC1501 FOS-type SLED Chip Specifications@ (T_{chip}=25°C) (Preliminary)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_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:	Δ		0.1	0.2	dB
Operating Current	I_F			150	mA
Far Field	Available upon request				

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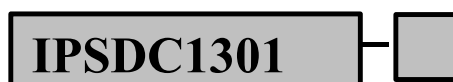
IPSDC1502 FOS-type SLED Chip Specifications@ ($T_{\text{chip}}=25^{\circ}\text{C}$) (Preliminary)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Peak Wavelength	λ_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:	Δ		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	λ_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:	Δ		0.2	0.3	dB
Operating Current	I_F		250		mA
Far Field	Available upon request				

Part Numbering Structure



Model-

IPSDC1301: 1310 nm FOS-type SLED chip

IPSDC1302: 1310 nm OCT-type SLED chip

IPSDC1501: 1550 nm SLED chip

Assembly type:

1 = Bare chip

2 = Chip On Carrier

3 = Chip On Submount

Example: IPSDC1301-1: 1310 nm FOS-type SLED bare chip.

Corporate Office

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