

Super-Luminescent Light Emitting Diode Device (Extra Wide Bandwidth)

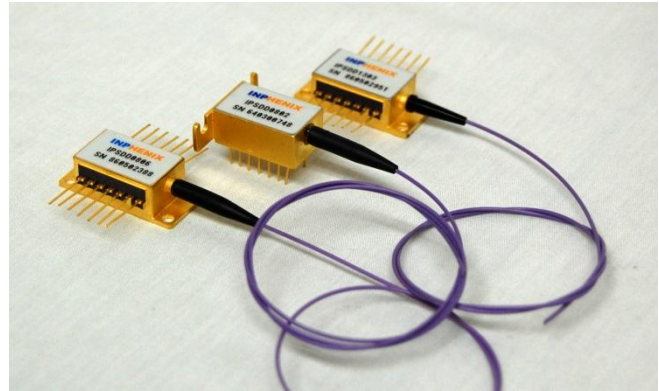
IPSDD08ND (-I/-II/-III/-IV/-V/-VI) (N=2, 3 or 4)

Features

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

Applications

- Broadband Light Source
- Distributed Fiber Optic Sensor (FOS)
- Biomedical Imaging Device
- OCT Diagnostic System



Device Specifications

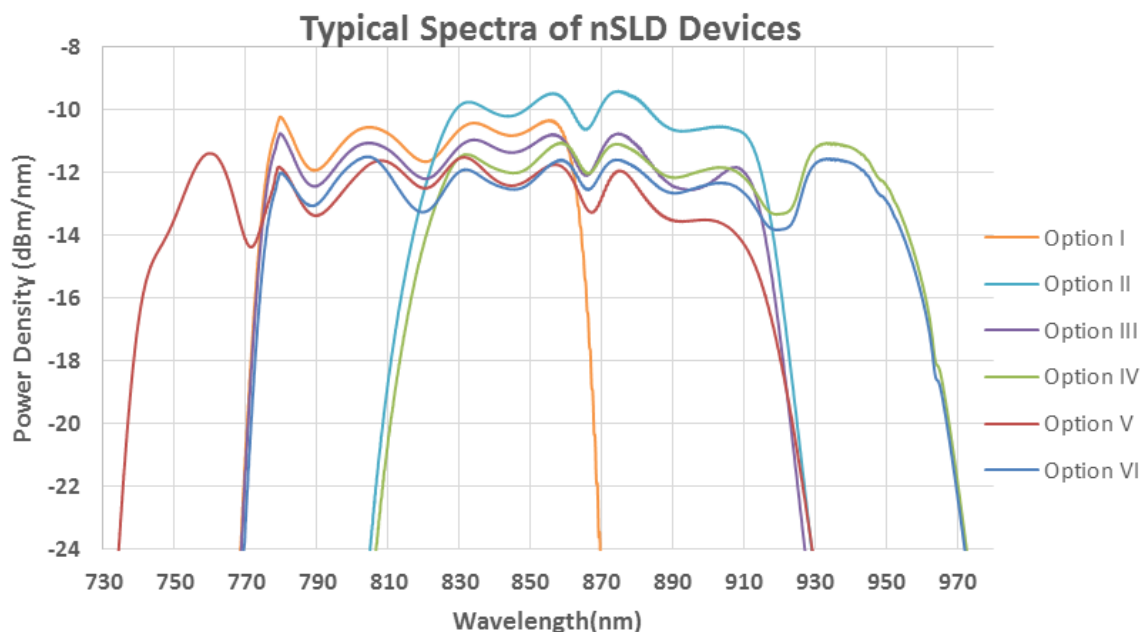
Item		Specifications					
Part Number	Option	Central Wavelength @-3dB	-3 dB Bandwidth /Min.	-13dB Bandwidth /Min.	Optical Power (CW)/Min.	Spectrum Flatness (DIP)/Max.	Ripple /Typ.
		nm	nm	nm	mW	dB	dB
IPSDD082D	I	820±10	85	100	7.5	2.5	0.15
IPSDD082D	II	870±10	90	110	12	2.5	0.15
IPSDD083D	III	850±10	130	155	12	3	0.15
IPSDD083D	IV	890±10	135	170	12	3	0.15
IPSDW084D	V	830±10	150	190	12	5	0.15
IPSDW084D	VI	870±10	170	200	12	3	0.15
Back Facet Monitor (I _{MON})		Available as required					

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
Maximum Current	250	600	mA
Thermistor Resistance	10kΩ @ 25°C		
SLD Chip Temperature Setting	25°C		
Fiber Type	SMF		

Fiber Jacket	250μm tight buffer with 900μm loose tube
Package	14-pin BUT
Lead Solder Temperature	260°C for 10 Seconds

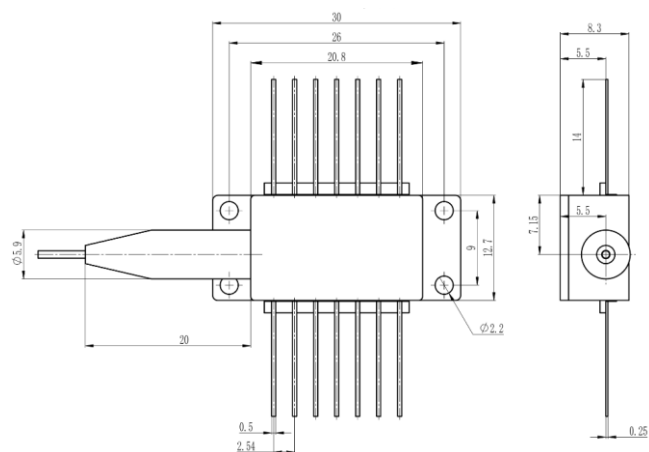
Typical Spectra



Package Size:

Unit: mm

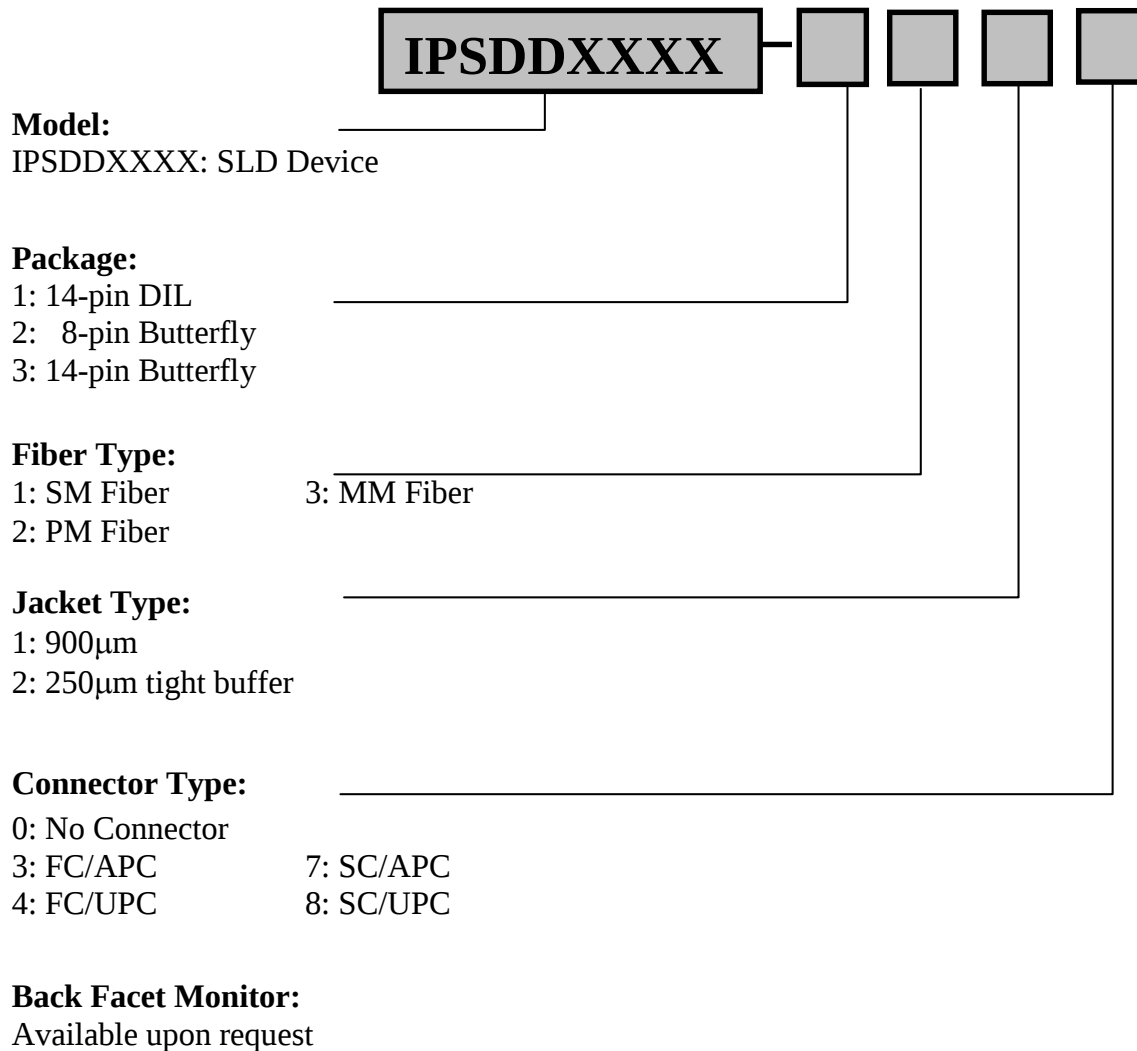
Pin Allocation



14-Pin BUT SLD Pin Functions			
Pin	Functions	Pin	Functions
1	TEC (+)	14	TEC (-)
2	PD Anode (+) *	13	SLD4 Cathode (-)
3	PD Cathode (-) *	12	SLD4 Anode (+)
4	Thermistor (+)	11	SLD3 Cathode (-)
5	Thermistor (-)	10	SLD3 Anode (+)
6	SLD1 Anode (+)	9	SLD2 Cathode (-)
7	SLD1 Cathode (-)	8	SLD2 Anode (+)

* NC without PD

Part Numbering System



Example: IP SDD 08 ND-3113: 8XXnm SLD in 14-pin BUT with 900μm SM Fiber with FC/APC connector

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