

Super-Luminescent Light Emitting Diode Device

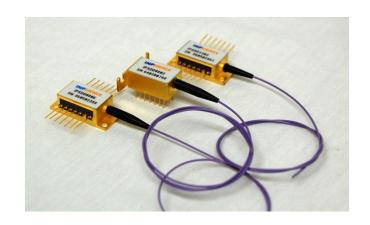
IPSDD0705 (770nm)

Features

- · Wide Optical Bandwidth
- · Customer Wavelength Available
- · High Output Power in SM/or PM Fiber

Applications

- · Broadband Light Source
- · Fiber Optic Sensor (FOS)
- · Biomedical Imaging Device
- · Illumination for OCT System



Device Specifications

Parameter	Symbol	Min.	Тур.	Max.	Unit
Central Wavelength	λ_{c}	760	770	780	nm
3dB Bandwidth	$\Delta \lambda_{3 ext{dB}}$	-	13	-	nm
Output Power in SM Fiber	Po	-	8	-	mW
Spectral Modulation Depth _{p-p}	Δ	-	0.10	0.15	dB
Operating Current	I_{F}	-	180	250	mA
Back Facet Monitor	Available upon request				

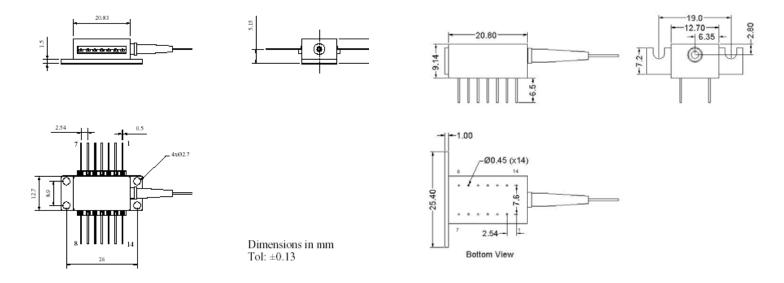
Absolute Maximum Ratings

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	
Maximum Current	270		mA	
Thermistor Resistance	10kΩ @ 25°C			
SLD Chip Temperature Setting	25°C			
Fiber Type	SMF/PMF/MMF			
Fiber Jacket	250μm tight buffer with 900μm loose tube			
Package	14-pin DIL/14-pin BUT/8-pin BUT			
Lead Solder Temperature	260°C for 10 Seconds			



Product Specification, Revision 1.52

Package Dimensions



14-Pin BUT Package

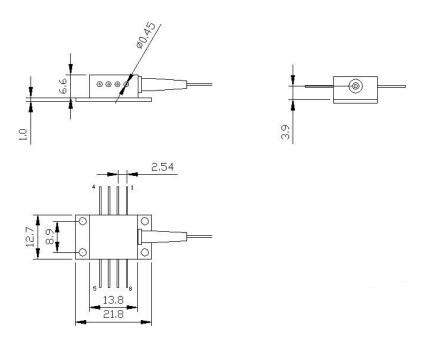
14-Pin DIL Package

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





8-Pin BUT Package

Pin Definition

8-pin BUT package				
Pin	Function			
1	TEC (+)			
2	NC			
3	NC			
4	SLED (+)			
5	SLED (-)			
6	Thermistor			
7	Thermistor			
8	TEC (-)			



Part Numbering System

	IPSDDXXXXX -	
Model: IPSDDXXXX: SLD	Device	
Package: 1: 14-pin DIL 2: 8-pin Butterfly 3: 14-pin Butterfly		
Fiber Type: 1: SM Fiber 2: PM Fiber	3: MM Fiber	
Jacket Type: 1: 900μm 2: 250μm tight buffer		
Connector Type:		
0: No Connector 3: FC/APC 4: FC/UPC	7: SC/APC 8: SC/UPC	

Back Facet Monitor:

Available upon request

Example: IPSDD0805-1224: 850nm SLD in 14-pin DIL with 250µm tight buffered PM Fiber with FC/UPC connectors

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