

Super-Luminescent Light Emitting Diode



Key Features

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

Applications

- Broadband Light Source
- Distributed Fiber Optic Sensor
- Biomedical Imaging
- OCT Diagnostic System

I. Electrical and Thermal Characteristics

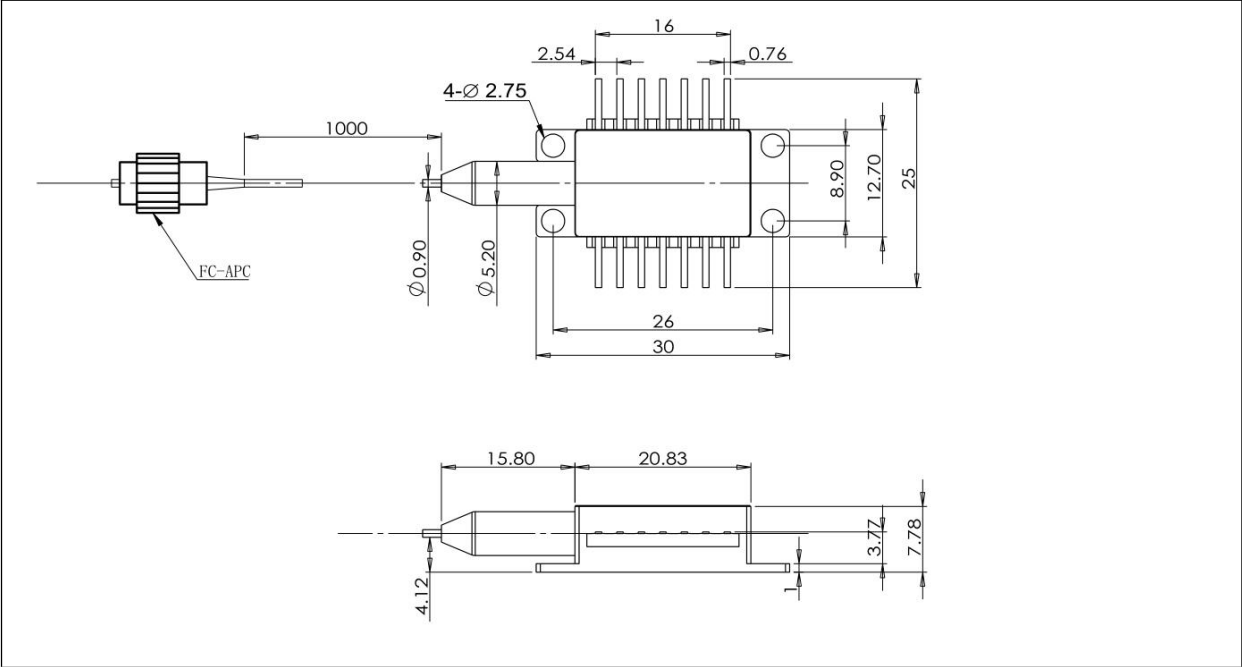
Parameter	Symbol	Min	Typ.	Max	Unit
Operating case temperature	T_C	0		70	$^{\circ}\text{C}$
SLED chip temperature	T_L	20	25	45	$^{\circ}\text{C}$
SLED Reverse Voltage	V_R			2	V
SLED Forward Current	I_F		500	600	mA
Photodiode Bias voltage	V_{PD}	-3		0	V
Photodiode Current	I_{PD}	20		500	μA
Photodiode Dark Current	I_D			100	nA
Thermistor resistance	R_{th}	9.5	10	10.5	Ω
Thermistor sensitivity index	β		4050		K
TEC current	I_{TEC}			1.8	A
TEC voltage	V_{TEC}			3.4	V

II. Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Output Power	P	5	10		mW
Central Wavelength	λ_C	1525	1550	1585	nm
3dB Spectral Bandwidth	$\Delta\lambda_{3dB}$		40		nm

Spectral Ripple	M		0.3	0.5	dB
Optical Isolation	R _o	25			dB

III. Mechanical Specifications (Butterfly Dimensions are in millimeters)



Butterfly Pin Assignment

1	TEC +	14	TEC -
2	Rth	13	Null
3	Null	12	Null
4	Null	11	SLED-
5	Rth	10	SLED+
6	Null	9	Null
7	Null	8	Null

V. Order Information

Family Name	Package	Wave length	-	Power	Fiber	Connector	-	Fiber Length
LTSLED	XMD: D Butterfly: B	1550	-	05mW: 05 10mW: 10	SM	1: SC/PC 2: SC/APC 3: SC/UPC 4: FC/PC 5: FC/APC 6: FC/UPC		015: 0.15m 050: 0.50m 100: 1.00m
LTSLED	B	1550	-	10	SM	5		100