

LE11xx series SLED chip

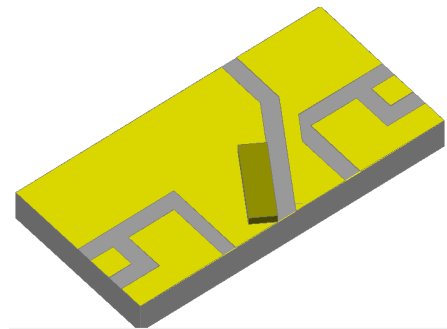
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Low Polarization 1310nm SLED Chip-on-Carrier

Description

LE11xx series are low polarization correlation and high power super luminescent diode.

The products features: low polarization correlation and high Optical power. They are widely used in instrument at 1290~1330nm operating wavelength. It is mount on an ALN carrier.



Features

- High optical power: $\geq 1.8\text{mW}$
- Optical bandwidth: 45nm
- Chip on ALN carrier

Application

- Fiber optic gyroscopes
- Optical fiber sensor
- Bandwidth optical source
- Optical communication

Absolute Maximum Ratings^[1]

Parameter	Symbol	Min	Max	Units	Notes
Reverse Voltage	V_R	---	2	V	
Forward Current	I_R	---	200	mA	
Operating Temperature ^[1]	T_C	15	40	°C	
Storage Temperature	T_{STG}	10	70	°C	Ambient temperature
Relative Humidity	RH	---	80	%	Sealed package
Maximum Chip on Carrier Solder	T_S	---	230	°C	

Note 1: Beyond the scope of absolute maximum ratings can cause permanent damage to the device. If it has been a

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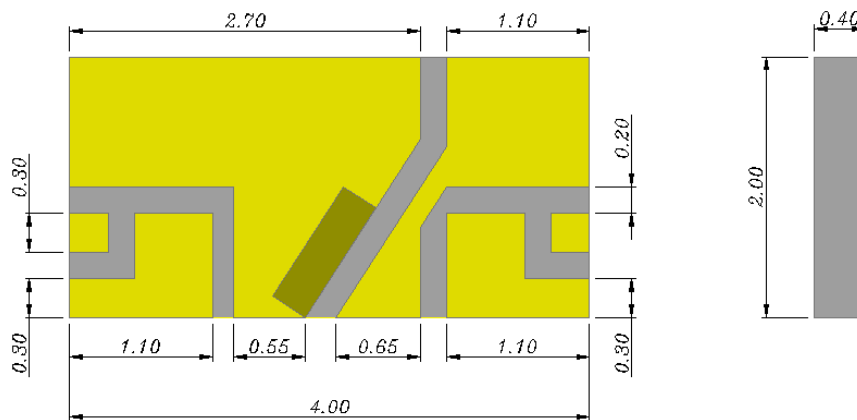
long time to use the device in the absolute maximum ratings may affect device reliability.

Electric and Optical Characteristics

 (All measurements are at Case temperature of $25 \pm 3^\circ \text{C}$ @1310nm unless stated otherwise.)

Parameter	Symbol	Min	Typical	Max	Units	Notes
Fiber Output Power ^[1]	Po	1.3	---	2.0	mW	CW, If=100mA
Spectral power ripple	ripple	---	---	0.25	dB	CW, If=100mA
Center Wavelength	λ	1290	---	1330	nm	CW, If=100mA
Spectral Width(-3dB)	$\Delta\lambda$	40	45	---	nm	CW, If=100mA
Operating Voltage	V_F	---	1.3	2.0	V	CW, If=100mA
Operating Current	If	---	100	150	mA	
Polarization dependent (TE/TM)		---	---	1.2	dB	CW, If=100mA
Photodiode Capacitance	C	---	---	10	pF	$V_{RMP}=5V, f=1\text{MHz}$
Vertical divergence angle	$\theta \perp$	---	---	45	deg	CW, If=100mA
Horizontal divergence angle	$\theta //$	---	---	25	deg	CW, If=100mA

Outline Dimensions

 All dimensions are $\pm 0.1\text{mm}$ unless otherwise specified (Unit: mm). For detail information please contact LinkPhotonic.


Package 1: Carrier 1 without thermistor

Precautions

Semiconductor chips are sensitive to electro-static damage. The module shall be packed with antistatic material for transportation. The working station and operators shall be grounded. Switching transients can cause electrical overstress (EOS) damage to the chips. EOS be may resulted from improper ESD handling, improper power sequencing, a faulty power supply or an intermittent connection.

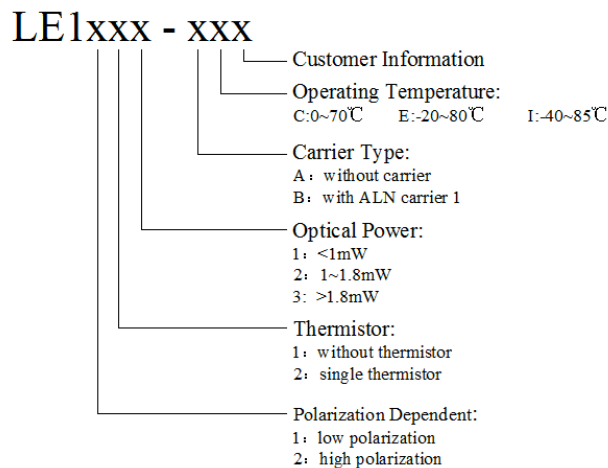
- Operators should always use antistatic bands and clothing, electric conductive shoes, and other safety appliances while at work are highly recommended.
- Humidity in working environment should be controlled equal or above 40 percent RH.
- It is recommended that grounding mats be placed on the surfaces of assembly line workbench and the surrounding floor in working area, etc.

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d. When mounting this product in other parts or materials which can be electrically charged (printed wiring boards, plastic products, etc.), pay close attention to the static electricity in those parts.ESD may damage the product.

Ordering Information



CAUTION:

This device is susceptible to damage as a result of electrostatic discharge and frangible , Take proper precautions during both handling and testing.

Statement

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