

DATASHEET

EOLC-1650-21-1

Infrared InGaAs LED Chip

Features:

- Size: 1080 μm
- Thickness: 150 μm
- Au alloy pad: 130 μm
- Bond-pad: n-up

Applications:

- Infrared sensing
- High power applications
- Industrial, scientific
- Gas Sensing, Proximity Sensing

Typical Electro-Optical Characteristics

Measurement conditions

 $T_{\text{ambient}} = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Emitting Color	Infrared					
Forward Voltage	V_f	$I_f = 100\text{ mA}$		0.8		V
		$I_f = 1000\text{ mA}$		1.15		V
Peak Wavelength	λ_D	$I_f = 100\text{ mA}$	1620	1650	1680	nm
FWHM	$\Delta\lambda$	$I_f = 100\text{ mA}$		86		nm
Radiant Power	P_o	$I_f = 100\text{ mA}$		15		mW
		$I_f = 1000\text{ mA}$		78		mW
Reverse Current	I_R	$V_R = 5\text{ V}$			5	μA
Rise Time	T_R	$I_f = 100\text{ mA}$		65		ns
Fall Time	T_F	$I_f = 100\text{ mA}$		122		ns

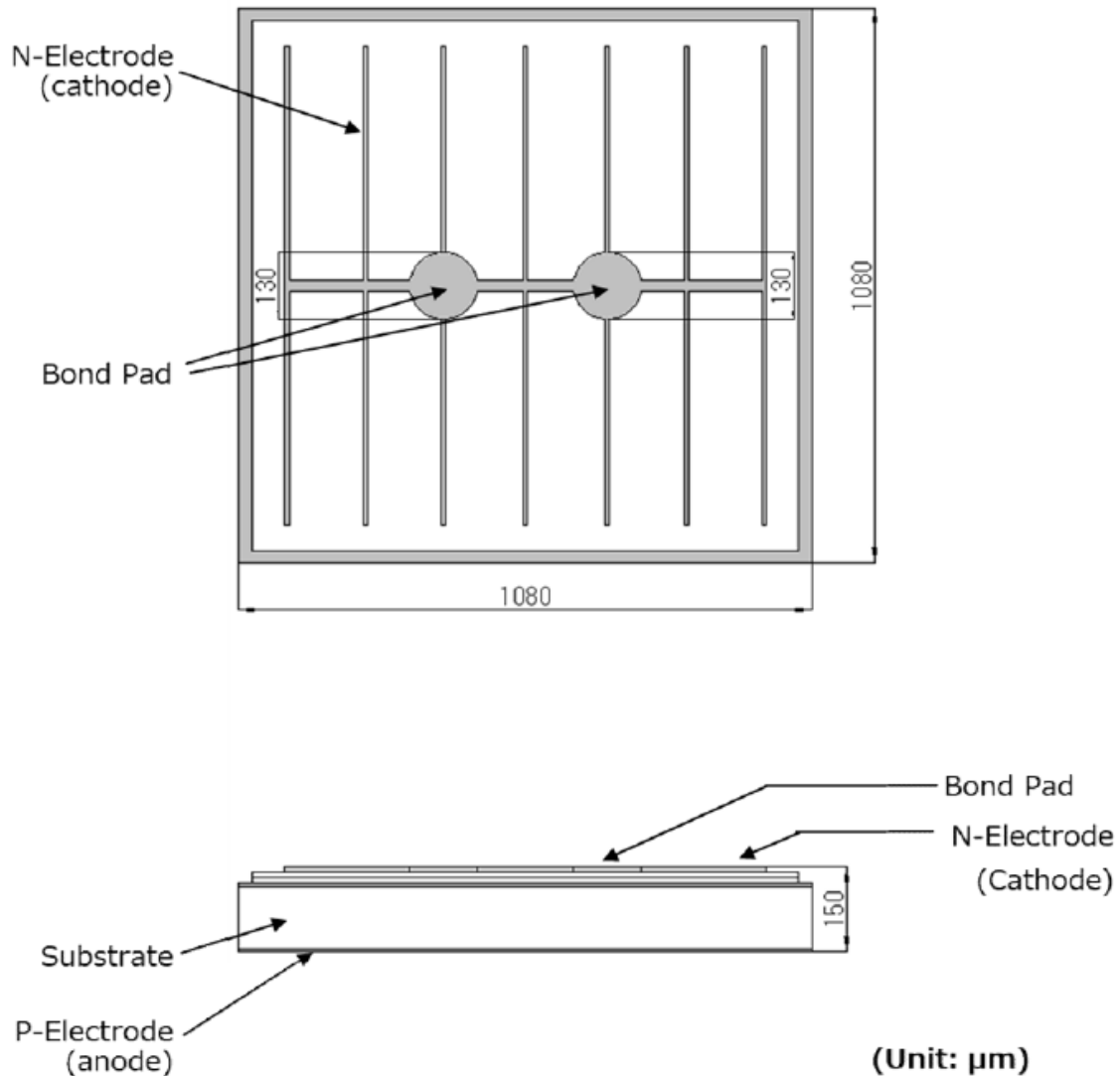
Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Forward Current ($T = 25^{\circ}\text{C}$, infinite heatsink)	$I_{f, \text{max}}$		1000	mA
Reverse Voltage	V_R		5	V
Operating Temperature	T_{op}	-40	+85	$^{\circ}\text{C}$

Mechanical Dimensions

Parameter	Value		Unit
Chip size	1080	± 25	μm
Thickness	150	± 10	μm
P-pad (bottom) / Au alloy	-	-	μm
N-pad (top) / Au alloy	130	± 10	μm

Outline Drawing



Dice delivered on adhesive film.

Notice

The information describes the type of component and shall not consider as assured characteristics. Terms of delivery and rights to change reserved. The data sheet may change without prior notification; the only valid issue and current revision can be on our website. Due to technical requirements, components may contain dangerous substances.

It is the responsibility of the customer to evaluate and ensure that the use of the products in their specific applications complies with relevant safety standards and regulations. Customers must assess the exposure conditions within their systems and ensure that appropriate measures are taken to prevent exceeding the permissible exposure limits outlined in IEC 62471. EPIGAP OSA Photonics GmbH does not assume liability for any non-compliance arising from the integration or usage of LEDs in customer systems.

Parameters can vary in different applications. The customer must validate all operating parameters for each application. EPIGAP OSA Photonics GmbH does not have the responsibility for the reliability and the degradation behavior of products made with EPIGAP OSA Photonics GmbH diodes as they depend not only on the product itself but also on the operation, manufacturing or design of the final products. The customer is responsible for ensuring the long-term stability of the product according to their requirements. If components are used in toys or life support systems, EPIGAP OSA Photonics GmbH must expressly authorize the use of the components prior to incorporating them into the customer's systems! Packaging: EPIGAP OSA Photonics GmbH uses recyclable packages.

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