850 nm 2.5 G GaAs PIN Die

PL-DD0-00-S30-C0

Key Features

- **Topside connections for both contacts**
- **Large topside detection area**
- **Anti-reflective coating for 850 nm**
- **Monolithic insulating mounting surface**
- **Data rates from 622 Mbps to 2.5 Gbps**
- **Custom physical configuration and performance specification tolerances are available**

Benefits

- Large active area provides improved alignment tolerances and ease of barrel attachment
- Small die dimensions allow flexible assembly options

The JDSU single die 850 nm 2.5 Gbps GaAs PIN is designed for high-speed optical data communication applications. The topside illuminated device has a large optical detection area, Ø=120 µm, for increased process tolerance during assembly. The backside mounting surface is electrically isolated from the device electrodes for simplified assembly. The PIN is designed for datacom applications using 850 nm multi-mode 50/125 µm or 62.5/125 µm fiber.

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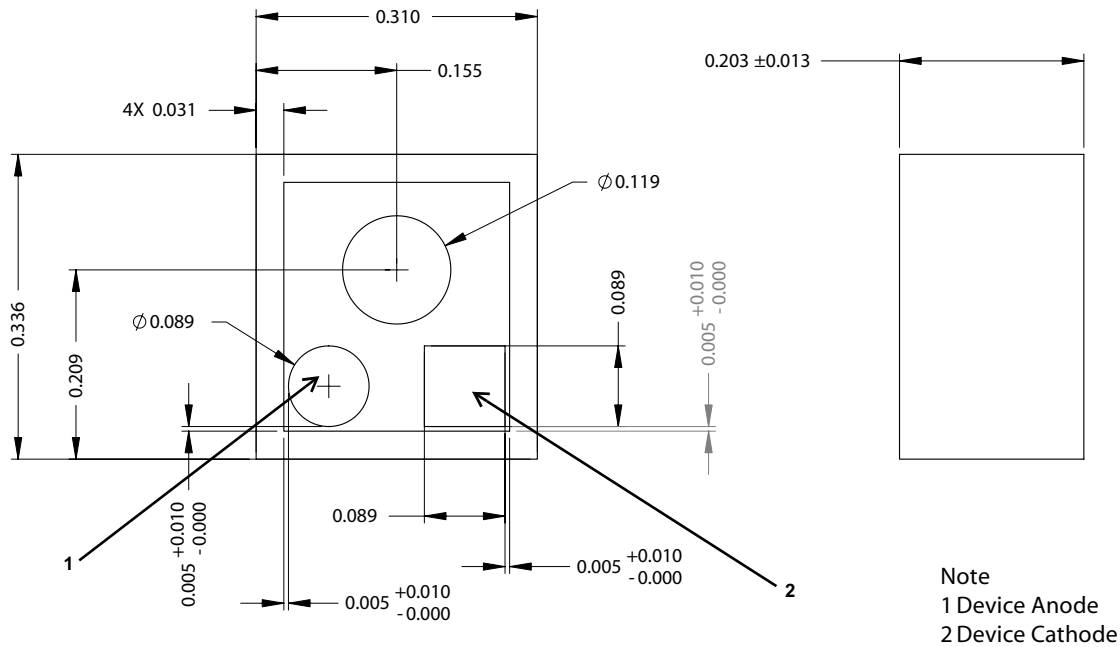
Mounting Dimensions



Note
1 Device Anode
2 Device Cathode

Dimensions are in mm

Shipping Information

Shipped in anti-static 2" x 2" gel pack containers. 1000 per gel pack.

Absolute Maximum Ratings

(T_{case} = 30 °C, Continuous Wave (CW) operation unless otherwise stated.)

Parameter	Symbol	Ratings	Unit
Storage temperature	T_{st}	-40 to +125	°C
Forward current	I_f	5	mA
Reverse voltage	BVR_{PD}	-40	V
Reverse current	I_R	1	mA
ESD[1]		Class 1	

Note:
Conditions exceeding those listed may cause permanent damage to the device. Devices subjected to conditions beyond the limits specified for extended periods of time may adversely affect reliability.

1. HBM

Electro-optical Characteristics

(T_{case} = 30 °C, CW operation unless otherwise stated.)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
PIN Diode						
Detection wavelength	λ_p			850		nm
Operating temperature	T_{op}		-40		85	°C
Detection aperture	D			120		µm
Responsivity	R	V_R = 1.6 V λ = 850 nm	0.55	0.6		A/W
Dark current	I_D	V_R = 1.6 V		0.1	1.0	nA
Breakdown voltage	V_B		40			V
Capacitance	C	V_R = 2.0 V f = 1 MHz	0.6	0.75	0.8	pF
Rise/Fall time[1]	t_r t_f	20% - 80% 20% - 80%		100		psec
Bandwidth	BW	V_R = 2.0 V		3		GHz

1. Packaging, coupling, electronics and optical measurement hardware affect rise/fall time measurement.

Order Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: PL-DD0-00-S30-C0

Part Number	Description
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