

Lighting

Imaging

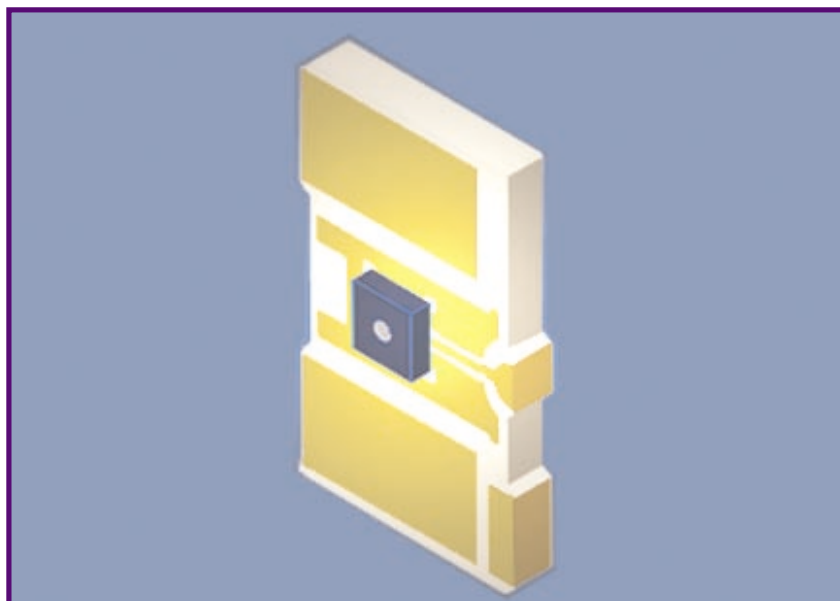
Telecom



Detectors - Mounted on ceramic

High-Speed InGaAs PIN C30734ECER

Detectors - Mounted on ceramic



Description

The C30734ECER is a high-speed InGaAs PIN photodetector. The chip-on-carrier photodetector features low capacitance and exceptionally high bandwidth for ease of integration into the OC-192 optical receiver.

Committed to supplying the highest quality products, PerkinElmer Optoelectronics is certified to meet ISO 9001. The C30734 series is designed to satisfy Telcordia quality specification GR-468-CORE. All devices undergo periodic process qualification programs to assure high reliability.

Features

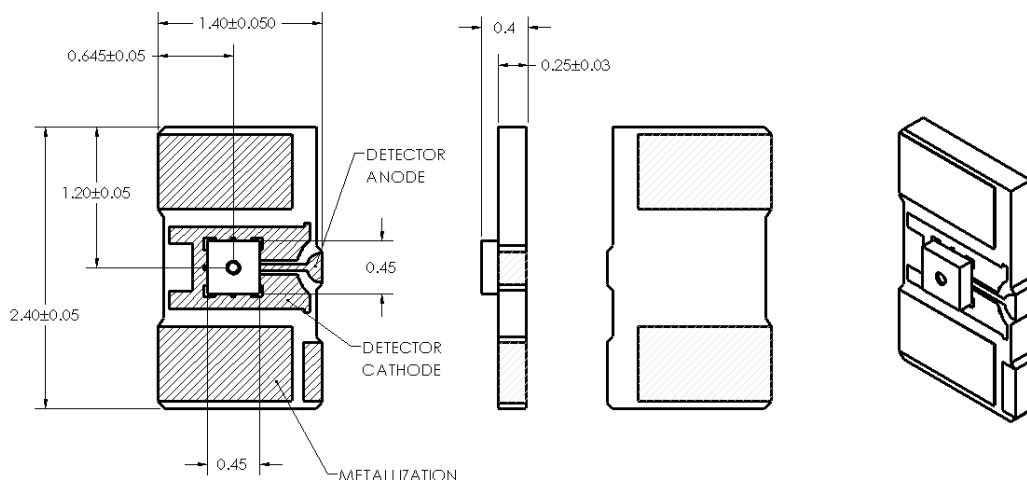
- Large bandwidth: 11 GHz minimum @ Vop= 5 Volts
- Overload in excess of 0 dBm
- Operating wavelength range: 1260 nm - 1600 nm
- Wide operating temperature range: 0°C to 85°C
- Fluxless die attach
- Co-planar contact technology
- Improved fiber alignment tolerance due to integrated lens.

Applications

- For integration into OC-192 (10 Gbps) optical receivers
- High-speed networks
- Test equipment



Figure 1. Mechanical Dimensions



All dimensions are in millimeters (nominal)

Material: Alumina 99%
Finish: Ti. $.1\mu\text{m}$ nom / Pd. $.2\mu\text{m}$ nom / Au. $2.0\mu\text{m}$ nom.

Specifications

Test Conditions: $T=22^{\circ}\text{C}$, $V_{\text{op}} = 5$ Volts. Limits applicable at 22°C , unless otherwise specified.

Parameters	Minimum	Typical	Maximum	Units
Operating voltage	4	5		V
Active area diameter		30		μm
Responsivity, 1260 to 1600 nm	0.8	0.9		A/W
Dark current		<1	1	nA
Dark current (85°C)			50	nA
Capacitance			0.25	pF
Bandwidth (0 - 85°C)	11	13		GHz

C30734ECER

Maximum Ratings

Maximum forward current:	5 mA
Operating temperature	0/85 °C
Storage temperature	-40/85 °C

Ordering Guide

Generic device type:	C30734ECER
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PerkinElmer Optoelectronics reserve the right to change or amend specifications and/or configurations at any time without notice.

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