

Product Brief



Key Features

- Flip chip ready
- 33-GHz bandwidth
- Telcordia qualified
- Die Level Hermeticity (DLH) Technology
- PAM-4 ready
- GSG three-pad configuration

Applications

- 25G/50G/100G Ethernet
- 128G (4×32 Gb/s) links
- Single-mode datacom and telecom
- Long wavelength (1260 nm to 1625 nm)
- Fiber-optic transceivers, receivers, and transponder



LPD3040

40-Gb/s InGaAs PIN Photodiode

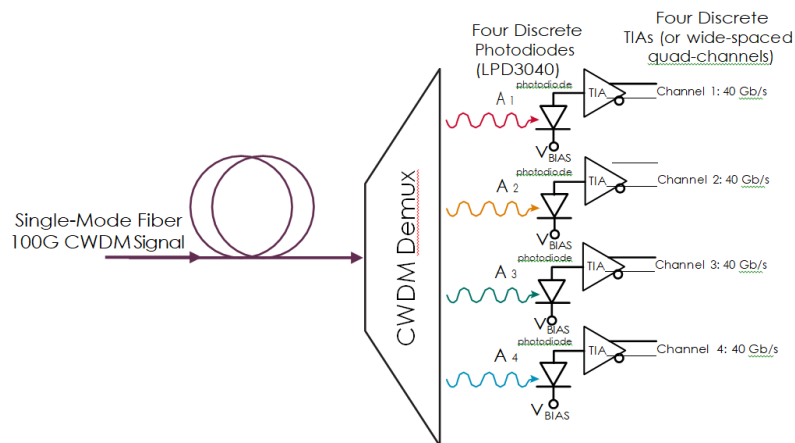
Overview

The Broadcom LPD3040 is a mesa-structured, InGaAs-based PIN photodiode offering high responsivity, low dark current, and low capacitance for high-bandwidth, high-performance optical receiver designs.

The LPD3040 is designed with extra bandwidth when compared with typical photodiodes used in 25-Gb/s NRZ signaling. This extra bandwidth enables the LPD3040 to work with 40-Gbaud PAM-4-type signals. The extra bandwidth also helps to ensure the linear fidelity of the PAM-4 signaling is preserved and cleanly launched into a linear TIA channel.

Broadcom DLH Technology™ is applied to the semiconductor device coatings (passivation, etc.) on the photodiodes to enable the die themselves to act as the hermetic seal against GR-468-type environments.

CWDM4 into Four Discrete Diodes



Ordering Information

Product Code	Description
LPD3040	InGaAs PIN photodiode: Blue tape, 6" hoop frames, max. 16,000 die/frame
LPD3040-GP	InGaAs PIN photodiode: 2" Gel-Pak, vacuum release, max. 100 die/pack