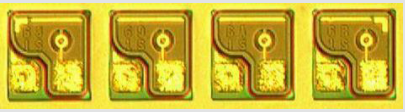
Product Brief

AFCD-V24KB

10 Gb/s 850 nm 1×4 Array Oxide VCSEL for 40GbE



Key Features

- 850 nm wavelength range
- Data rates from DC to 10.3125 Gb/s
- High-power output
- Suitable for use in non-hermetic environments

Overview

The Broadcom® AFCD-V24KB is a 10 Gb/s, 1×4 array, 150 µm thick, 850 nm wavelength, GaAs-based oxide Vertical Cavity Surface Emitting Laser (VCSEL) designed for high-speed optical data communication applications including 40-Gigabit Ethernet. The VCSEL is engineered for superior dynamic performance and optical power over temperature. VCSEL arrays have both anode contacts and common cathode contacts on the top side of the chip for convenient wire bonding. High-speed operation is achieved at low currents, making the VCSEL arrays particularly well suited for applications that require minimal power consumption and heat dissipation.

Each VCSEL produces a circularly symmetric, narrow beam which, with appropriate lenses, enables optical power to be efficiently coupled into 50 µm/125 µm and 62.5 µm/125 µm multi-mode fiber. This high-performance VCSEL array is designed for use in 40 Gb/s Ethernet links compliant with IEEE802.3ba and 40GBASE-SR4.

Broadcom VCSELs are extensively tested to insure performance, wear-out lifetime, and wet-humid (85% RH/85°C) operating life in non-hermetic environments.

VCSEL arrays are shipped on medium-tack, blue tape, 6-inch rings.

Ordering Information

Product Code	Description
AFCD-V24KB	10 Gb/s 850 nm, 1×4 Array, Oxide VCSEL for 40GbE

Visit the website at: broadcom.com/products/fiber-optic-modules-components/components-broadband/

AFCD-V24KB-PB100