

AFCD-V21KA1

10 Gb/s 850 nm Oxide VCSEL



Key Features

- 850 nm wavelength range
- Data rates from DC to 10.3125 Gb/s
- Temperature range from 5°C to 90°C
- Suitable for use in non-hermetic environments

Overview

The Broadcom® AFCD-V21KA1 is a 10 Gb/s, 150 μm thick, 850 nm wavelength, GaAs-based oxide Vertical Cavity Surface Emitting Laser (VCSEL) designed for high-speed optical data communication applications. The VCSEL is engineered for superior dynamic performance and optical power over a narrower temperature range as compared to the standard. This high-performance VCSEL is designed for use in 10 Gb/s Ethernet links compliant with IEEE 802.3ae 10GBASE-SR.

The VCSEL has a top-side anode contact and a metalized bottom surface for the cathode. The VCSEL produces a circularly symmetric, narrow beam which, with appropriate lenses, enables the optical power to be efficiently coupled into 50 μm /125 μm and 62.5 μm /125 μm multi-mode fiber.

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

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

Ordering Information

Product Code	Description
AFCD-V21KA1	10 Gb/s, 850 nm, Oxide VCSEL