

# AFCD-V51KC

## 28 Gb/s Oxide VCSEL

### Key Features

- 850 nm wavelength range
- Data rates from DC to 28 Gb/s
- High-power output
- Suitable for use in non-hermetic environments

### Overview

The Broadcom® AFCD-V51KC is a 28 Gb/s, 150  $\mu\text{m}$  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 temperature. The VCSEL has 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 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  $\mu\text{m}$ /125  $\mu\text{m}$  and 62.5  $\mu\text{m}$ /125  $\mu\text{m}$  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.

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

### Ordering Information

Product Code	Description
AFCD-V51KC	28 Gb/s Oxide VCSEL