

## Product Brief



### Key Features

- 850-nm wavelength range
- Data rates from DC to 25.78 Gb/s for Ethernet and CPRI applications from -20°C to 90°C, with -40°C cold start
- Compliant with 25GbE
- Compatible with CPRI applications
- High-power output
- Suitable for use in non-hermetic environments
- Optimized performance for wide operating temperature range
- Long wear-out lifetime at 90°C

# AFCD-V61XT

## 25-Gb/s Oxide VCSEL

### Overview

The Broadcom® AFCD-V61XT is a 25-Gb/s, 150-μm thick, 850-nm wavelength, GaAs-based oxide Vertical Cavity Surface Emitting Laser (VCSEL) designed to be used in Ethernet and CPRI optical links over multimode fiber. The VCSEL is engineered for superior dynamic performance and optical power over a wide operating temperature range. The VCSEL has both an anode contact and a cathode contact on the top side of the chip for convenient wire bonding. High-speed operation is achieved at low currents, which make the VCSEL arrays particularly well-suited for applications where power consumption and heat dissipation must be minimized.

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 multimode fiber.

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

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

### Ordering Information

Product Code	Description
AFCD-V61XT	25-Gb/s Oxide VCSEL for a wide operating temperature range of -20°C to 90°C with -40°C cold start. Narrow spectral width. Narrow wavelength range.