

# The function of a 32-array waveguide grating

Arrayed waveguide gratings (AWG) are commonly used as optical (de)multiplexers in wavelength division multiplexed (WDM) systems. These devices are capable of multiplexing many wavelengths ...

nt K. Smit 4.1 Introduction Arrayed Waveguide Grating (AWG) multiplexers/demultiplexers are planar devices which are based on an array of waveguides with both imaging and dispersive properties.

A 32-channel 50-GHz spaced arrayed-waveguide grating with our innovative configuration has been designed and fabricated. The performance of the device has been fully tested by using a tunable ...

As far as we know, this fabricated silicon AWG demonstrates the best comprehensive performance for 32 channels with 100-GHz channels achieved using lithography, which will be highly desirable for wavelength division multiplexing ...

What is an arrayed waveguide grating? An arrayed waveguide grating (AWG) is a device, typically built as a planar lightwave circuit, that can separate or combine optical signals of different wavelengths. It ...

A low-cost multi-wavelength light source for WDM-PON (Wavelength Division Multiplexing passive optical network) can be obtained by dividing the wide spectrum of LED light using array waveguide gratings ...

These designs of these devices are based on an array of waveguides and demultiplexers in a Wavelength Division Multiplexed (WDM) waveguide with both imaging and dispersive properties.

A 32-channel 100 GHz silicon photonic integrated arrayed waveguide grating router (AWGR) is experimentally demonstrated for dense wavelength division multiplexing ...

The arrayed waveguide grating (AWG), one of the fundamental parts of the FBG interrogation system, is essential for driving the downsizing of the system and high-speed rate.

In this review, an overview of the available methods for improving the bandwidth, spectral resolution, and transmission function shape of AWGs is provided. The working principle as well as the advantages ...

It is also possible to do this in a single device called an arrayed waveguide grating. The arrayed waveguide grating (AWG) looks a bit like a very complex MZI, but it ...

A 32-channel 100 GHz silicon photonic integrated arrayed waveguide grating router (AWGR) is experimentally demonstrated for dense wavelength division multiplexing (DWDM) applications.

# The function of a 32-array waveguide grating

Designed and tested a PLC-based 32-channel array waveguide grating. Comparison of the edge filtering method and the relative intensity method. Focusing on the interrogation method ...

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