ZITHA TECH SPECIALTY CABLES (Pty) Ltd

Fiber optic connector V-groove



Overview

Install fiber optic connections rapidly with this field-installable fast connector designed for FTTH and outdoor applications. OZ Optics V-Groove array assemblies assist in developing next generation photonic devices. The arrays are manufactured using precision silicon wafer V-Groove technology or Pyrex V-Groove in conjunction with a Pyrex lid, enabling sub-micron alignment accuracy with UV cure attachment capabilities. OZ. Fiber optic assemblies range from a single fiber cable terminated with industry standard connectors on both ends and jacketed in flexible sheathing, to a multi-fiber design consisting of multiple inputs and/or outputs, each with different cross-section areas and geometries, each requiring a custom. Silicon V-grooves offer a pathway to significantly improve the cost effectiveness of the fiber attach process in silicon PIC packaging. What you will learn in this ebook?

Learn common approaches to addressing the fiber packaging problem in silicon photonics Discover how Atomica's V-groove. Our high-precision fiber arrays are engineered to meet rigorous technical specifications, enabling customers to define critical parameters such as channel count, fiber spacing, fiber types, face grinding angles, and overall dimensions. The fabrication of the V-Groove from.



© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

Article Content

Fiber Arrays & V-Grooves Fiberguide Industries

Fiberguide produces extremely tight tolerance one-dimensional (V-Grooves) and two-dimensional arrays using the supplier''s patented manufacturing techniques. These arrays range from a few fibers to

V-grooves: Solving the Fiber Coupling Problem

Discover how Atomica''s V-groove technology can facilitate low cost, high volume manufacturing of low loss, stable connections between silicon photonic integrated circuit (PIC) chips and optical fiber and

V-Groove Fiber Arrays

With a comprehensive range of connector interfaces—including MTP, MT, MMC, TMT, FC, LC, SC, and E2000—and manufactured from materials such as borosilicate glass, fused silica, silicon, and metal,

What Is a V-Groove Fiber Array? Applications and Advantages

From telecommunications to photonic research, V-groove fiber arrays have revolutionized how optical fibers are aligned, connected, and scaled. Their precision, modularity, and reliability make them

V-Groove :: LinkStar Microtronics

With straight grooves and smooth sidewall, LinkStar''s Photoetching V-Groove offers extra high degree of accuracy without cumulative error. In this way, it aligns the fiber cores precisely with the optical

V-Groove Chips and Fiber Arrays | Corning

V-Groove Chips and Arrays Corning offers a suite of cost-effective glass V-grooves and arrays that are pitched at 127 microns and 250 microns, with product configurations ranging from 1 to 96 channels.

Metel V Groove Field Assembly Fiber Fast Connector

Install fiber optic connections rapidly with this field-installable fast connector designed for FTTH and outdoor applications. This connector features waterproof head compatibility for protected outdoor

Optical Fiber V Groove

Description Features: 1.High accuracy Fiber Pitch Positions V-groove 2.High capacity using automated batch processing by Disco Dicing Machines 3 patible with 125/250 (or customzied fiber) micron

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

OZ Optics Online | OZ Optics Highlights Advanced Silicon Photonics

1D V-Groove & 2D Fiber Matrix Array (2D FMA) Assemblies High-precision, high-density fiber coupling solutions for photonic chip interfaces and co-packaged optics platforms.

Fiber Optic Fusion Splicer Buyer''s Guide: Key Factors and Cost Drivers

Fiber optic fusion splicers are critical tools for deploying and maintaining fiber networks, with significant variations in performance, features, and pricing. This guide breaks down the key cost

Best 12-Core Ribbon Fusion Splicer TEKCN TC-600M | Low Loss Mass Fiber ...

High Precision V-Groove Alignment The high-precision fixed V-groove alignment system ensures accurate fiber positioning and stable low splice loss performance. Fast Splicing Speed Splicing Time:

Datasheet

V-Groove array assemblies can be manufactured with a hermetic feedthrough attached. This enables the development of multichannel photonic devices capable of meeting Telcordia requirements. Fiber

Fiber Alignment V-Groove: Precision For Optimal Fiber Optic

The fiber alignment V-Groove is a critical tool in the realm of fiber optic technology, enabling precise alignment and ensuring optimal data transmission. Its functionality, including

Multi-core fiber connector using V-groove ferrule

We propose a novel connector for a multi-core fiber (MCF) that employs a V-groove ferrule. The proposed connector achieves rotational angle alignment by the insertion of a V-groove

Fabrication of a V-groove on the optical fiber connector using a ...

As optical communication is being substituted for telecommunication, the demand of a large variety of fiber optic components is increasing. V-groove substrates, one of the module

What Is a V-Groove Fiber Array? Applications and

In the ever-evolving landscape of photonics and fiber optic technologies, V-groove fiber arrays have emerged as a crucial component for achieving precision

V-Groove :: LinkStar Microtronics

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved

In this way, it aligns the fiber cores precisely with the optical waveguide circuit, and greatly reduces the coupling loss. The fabrication of the V-Groove from 8-inch silicon wafer ensures high productive

Fabrication of a V-groove on the optical fiber connector using a ...

The V-groove for fiber optic component is fabricated by the traditional method using the miniaturized machine tool. Our study shows that the machined V-groove can be obtained on both

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Contact Us

Continue your research online:

Website: https://zithatech.co.za
Technical inquiry: https://zithatech.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ZITHA TECH SPECIALTY CABLES (Pty) Ltd - All rights reserved