



A Furukawa Company

TrueLase™ Optical Fibers

12/250 Active LMA Double Clad Optical Fiber for Fiber Laser Applications



Features and Benefits

- Enables easy & efficient integration for monolithic fiber lasers and amplifiers
- Excellent fiber consistency and uniformity using OFS proprietary RE vapor phase delivery process
- TrueClad™ low index coating for extensive durability in sensitive environment and operating conditions

Applications

- High power fiber lasers and amplifiers
- Lasers for material processing
- Industrial, medical and military

Overview

Development of the new OFS TrueLase Optical Fiber family was driven by an increasing demand for a reliable fiber supply in the rapidly growing fiber laser market space. Fiber lasers had their start in the erbium doped amplification work done in the early 1990's. OFS, a global market leader in the design and manufacture of Erbium-Doped Optical Fibers, possesses the expertise and experience in fiber fabrication technology necessary to meet that demand. OFS has been developing and manufacturing high power components and modules for many years and understands the reliability standards expected in the diverse material processing applications.

The OFS family of TrueLase 12/250 Active and Passive LMA Double Clad Optical Fibers is an ideal tool for integrated high power fiber lasers and amplifiers. Our fibers combine high clad absorption, precision matched mode field diameter designs, and unprecedented manufacturing control ensuring easy integration across the entire laser architecture. All TrueLase optical fibers utilize the latest TrueClad low index polymer coating specially engineered to ensure superior reliability & performance in the most demanding of environments.



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YB12-250

Optical Specifications

| | |
|----------------------------------|------------------|
| Background loss (@ 1150 nm) | <10 dB/km |
| Cladding loss (@ 1100 nm) | <10 dB/km |
| Cladding numerical aperture | ≥0.46 |
| Core numerical aperture (NA) | 0.070 ± 0.005 |
| LP ₀₁ MFD (@ 1070 nm) | 12 ± 0.8 μm |
| Cladding absorption (@ 915 nm) | 0.65 ± 0.15 dB/m |

Physical and Material Parameters

| | |
|----------------------------------|----------------------------|
| Core concentricity error | <0.3 μm |
| Cladding diameter (flat to flat) | 250 ± 3 μm |
| Coating outside diameter | 400 ± 15 μm |
| Cladding non-circularity | Not Applicable |
| Coating type | TrueClad low index coating |
| Fiber geometry | Octagonal |

Performance

| | |
|---|---|
| Proof test | 100 kpsi |
| Fiber efficiency (with respect to 2W launched power) | >71% 915 nm forward pumped amplifier |

Ordering Information

| | |
|--------|-------|
| Item # | 79539 |
|--------|-------|

Specifications are preliminary and are subject to change.



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For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.