DCF-YB-15/250P-FVA

Yb-Doped Fiber – True Phosphosilicate

The high demand for a photodarkening-free optical fiber for multi kW single-mode CW fiber laser applications near 1 Qm has driven the development of this phosphosilicate fiber. Manufactured under a carefully control process, its refractive index profile and core chemical composition allow high reproducibility. This ensures a reliable batch-to-batch consistency. With output power up to 1.5 kW with very low nonlinear effects, this fiber is best for industrial applications requiring high-power output.

Features & Benefits

- Photodarkening-free – excellent batch-to-batch consistency
- Accurate matching MFD design with related passive fiber – allows single-mode operation and low splicing losses
- High cladding absorption – reduces fiber length in order to mitigate nonlinear effects such as SRS
- High fiber laser efficiency (> 70%)
- High stability against pump wavelengths between 915 nm to 970 nm
- Output power up to 1.5 kW

Applications

- High-power CW fiber lasers
- Material processing: cutting and welding
- Medical

Related Products

- DCF-UN-10/245-080
  Matched double-clad passive fiber

Specifications

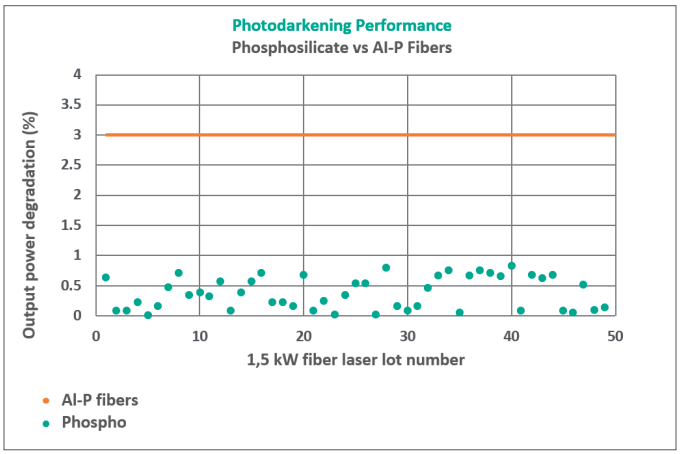
Optical

Cladding Absorption @ 915 nm (dB/m)	0.73 ± 0.05
Numerical Aperture – Core	0.11 ± 0.01
Numerical Aperture – Cladding	> 0.45
Background Loss @ 1200 nm (dB/m)	< 10
Mode Field Diameter @ 1080 nm (µm)	11.5 ± 0.7

Geometrical & Mechanical

Core Diameter (µm)	15 ± 2
Cladding Diameter (µm)	250 ± 5
Core/Cladding Concentricity Error (µm)	< 1
Cladding Geometry	Octogonal
Coating Diameter (µm)	375 ± 15
Proof Test (kpsi)	≥ 100

Performances



ISO 9001:2015 certified quality system | RoHS and REACH compliant.
All specifications are subject to change without notice. Reference: 101-10-0913.R1

2700 Jean-Perrin, suite 121, Quebec QC G2C 1S9 Canada | sales@coractive.com | + 1 418 845-2466