

# Yb-MCOF-35/250-56/400-07-2.2-T0.7 PM

## Yb-doped large mode area tapered PM optical fiber



Developed by our key partner INO, the Yb-MCOF tapered fiber is designed for  $M^2$  lower than 1.2 making it the perfect choice for applications requiring superior beam quality. It features a confined core for selective gain amplification and multi-layer cladding for enhanced suppression of higher order modes.

### Features & Benefits

- Designed for output  $M^2$  lower than 1.2
- Large core diameter
- Low photodarkening
- High birefringence
- Confined core for selective gain amplification

### Applications

- High Peak Power Lasers
- Ultrafast Amplifiers
- Frequency Conversion

### Specifications

#### Optical

Cladding Absorption @ 915 nm (dB/m)	2.2 ± 0.5
Cladding Absorption @ 975 nm - Nominal (dB/m)	8
Numerical Aperture - Core	0.07 ± 0.01
Numerical Aperture - Cladding	> 0.47
Birefringence	≥ 1.4 × 10 <sup>-4</sup>
Beam quality factor $M^2$	< 1.2

#### Geometrical & Mechanical

Taper Length (m)	0.7 ± 0.2
Non-Tapered Sections Length (m)	> 1.0
Small Core Diameter (µm)	35 ± 3
Small Cladding Diameter (µm)	250 ± 10
Small Coating Diameter (µm)	500 ± 30
Large Core Diameter (µm)	56 ± 5
Large Cladding Diameter (µm)	400 ± 20
Large Coating Diameter (µm)	520 ± 30
Confined Core	Yes
Depressed Cladding	Yes