

YTTERBIUM-DOPED DOUBLE CLAD FIBER

YF-1060-12.5/125-0.5 • YF-1060-20/200-0.5

YF-1060-25/250-0.5

RAYBIUM's YB-DOPED DOUBLE-CLAD FIBER

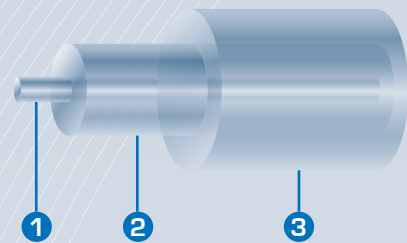
is designed for high-power fiber lasers and is an excellent choice for e.g. marking applications. Our proprietary low-photodarkening glass guarantees high reliability under high-power conditions. A high pump core NA of 0.50 enables efficient coupling of the pump light.

- **HIGH PHOTODARKENING RESISTANCE**

- **ALUMINOSILICATE CORE GLASS**

- High absorption and emission cross section
- Low background loss

- **HIGH PUMP CORE N.A.**



1. Core doped with Yb and Al

2. Inner cladding (pure silica) for pump light guiding

3. Low-index acrylate coating for pump light confinement

SPECIFICATIONS

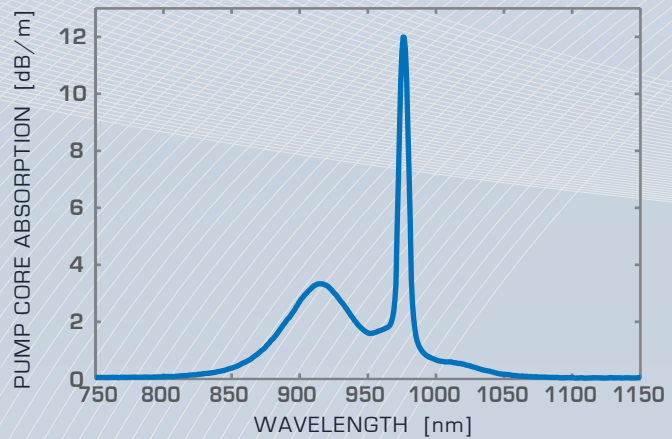
	YF-1060-12.5/125-0.5	YF-1060-20/200-0.5	YF-1060-25/250-0.5
Operating wavelength	1060-1100 nm	1060-1100 nm	1060-1100 nm
Pump core absorption @ 915 nm	3.3±0.5 dB/m	3.3±0.5 dB/m	3.3±0.5 dB/m
Pump core absorption @ 976 nm (nominal)	12 dB/m	12 dB/m	12 dB/m
Pump core absorption @ 1016 nm	0.6±0.1 dB/m	0.6±0.1 dB/m	0.6±0.1 dB/m
Polarization	random ¹	random ¹	random ¹
Photodarkening @ 633nm	<5 dB/m ²	<5 dB/m ²	<5 dB/m ²
Cladding N.A.	0.50	0.50	0.50
Core N.A.	0.10	0.07	0.07
Core diameter	12.5	20	25
Inner cladding diameter	125	200	250
Outer cladding diameter	245 µm	~300 µm	~350 µm
Outer cladding material	Low-index acrylate	Low-index acrylate	Low-index acrylate

¹ PM version available on request.

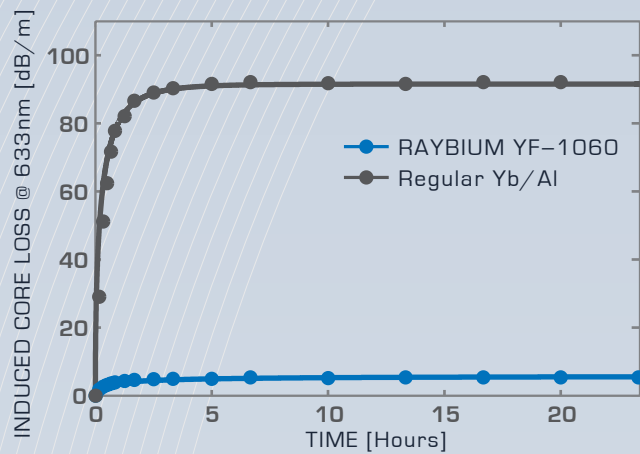
² Saturated induced core loss after 48 hours at 50% inversion.

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Typical Yb pump absorption spectrum for RAYBIUM YF-1060 series fiber.



Accelerated photodarkening measurement showing typical induced core loss at 633nm of RAYBIUM YF-1060 fiber compared to a standard Yb/Al-fiber with similar Yb-concentration.



Typical slope efficiency for RAYBIUM YF-1060 series fiber.

