

非线性光子晶体光纤

Nonlinear photonic crystal fiber

产品描述

Product description

我们的非线性光子晶体光纤有高非线性系数,其零色散波长在1微米附近,可配合1微米光源产生宽带的超连续谱。

另外,我们可根据客户需求提供定制化服务,例如更小芯径的光子晶体光纤以匹配更短的泵浦波长、锥形的光子晶体光纤等等。

Our nonlinear photonic crystal fiber has high nonlinear coefficient with zero dispersion wavelength at $\sim 1 \mu\text{m}$. The fiber is designed to generate broadband supercontinuum with pump sources at $1 \mu\text{m}$.

In addition, we provide customized services according to customer needs. For example, photonic crystal fiber with smaller core diameter in order to match shorter pump wavelength, tapered photonic crystal fiber etc.

产品特点

Product characteristics

高非线性系数
High nonlinear coefficient

适用于1微米泵浦
Dispersion optimized for $1 \mu\text{m}$ wavelength pump

单模
Single mode

弯曲不敏感
Bending insensitive

产品应用

Product application

超连续谱产生

Supercontinuum generation

产品规格

Fiber specifications

光学特性 Optical specifications

Model	PCF-850	PCF-1040
Zero dispersion wavelength	$850 \pm 20 \text{ nm}$	$1040 \pm 20 \text{ nm}$
Attenuation@980 nm	$< 10 \text{ dB/km}$	$< 10 \text{ dB/km}$
Mode field diameter (1/e ²)	$2.0 \pm 0.2 \mu\text{m} @ 890 \text{ nm}$	$4.2 \pm 0.2 \mu\text{m} @ 1064 \text{ nm}$
Numerical aperture	$0.3 \pm 0.05 @ 890 \text{ nm}$	$0.2 \pm 0.05 @ 1064 \text{ nm}$

物理特性 Physical properties

Material	Pure silica
Cladding diameter	$124 \pm 2 \mu\text{m}$
Coating diameter	$245 \pm 5 \mu\text{m}$