

## 光纤凸出型镀膜尾纤

### Protruding Fiber Tail with LC ferrule

#### 产品描述: Product Overview

光纤凸出型镀膜尾纤是指将镀膜光纤一端装配上陶瓷插芯（光纤头凸出陶瓷插芯端面一定距离），另一端保留裸纤的光纤组件。不同于传统的光纤与插芯平头装配方式，光纤凸出型尾纤有效避免同一平面膜层下面光纤、胶水、陶瓷插芯三种基材因热膨胀系数不一致导致的膜层开裂问题，在中高功率激光的耦合传输优势更为明显。Protruding fiber pigtail is a kind of assembly which install a ceramic ferrule to the end of the coated bare fiber and keep the fiber's endface some distance from the ferrule's endface. Different from the traditional fiber and ferrule flat assembly way. Protruding fiber pigtail can eliminate film cracking caused by inconsistent thermal expansion coefficients of different substrates (fiber, epoxy, ferrule) under the coating layer and has obvious advantage in fiber coupled high power laser diode.

#### 应用领域

#### Product Application

- 光纤激光器泵浦源耦合 Fiber laser pump diode coupling
- 工业高功率激光加工柔性传输 High power laser processing flexible transmission
- 医疗激光设备耦合输出 Medical laser equipment coupling transmission
- 高功率激光测试 High power laser test and measurement
- 光纤传感器（连接光电探测器）Fiber Optic Sensor (Connecting photoelectric detector)

#### 产品特点

#### Product Feature

- 光纤端面直接抛光，加工过程无需辅助胶水，避免因胶水残留导致的激光吸收，有效减少烧光纤问题。The fiber tip is directly polished without any epoxy in the process, which can avoid laser absorption caused by epoxy residue and reduce the fiber burn rate efficiently
- 裸光纤端面抛光后高度清洁，纤芯处无刮痕和麻点。High quality fiber tip polishing surface, without scratches and particles on the fiber core.
- 仅对裸光纤端面（不带任何插芯胶水）镀膜，消除膜层下面不同基材因热膨胀系数不一致导致的膜层开裂。Coat only on bare fiber tip (without ferrule & epoxy), which can eliminate film cracking caused by inconsistent thermal expansion coefficients of different substrates under the coating layer.
- 避免插芯和胶水近距离对激光芯片的影响，有效降低芯片 COD 和脏污。Avoid the impact of the ferrule and epoxy on the laser chip at a close distance, effectively reducing COD and chip Contamination.
- 低热吸收和高损坏阈值镀膜，光学损伤阈值 (> 200 兆瓦/平方厘米，美国第三方认证)。Low heat absorption and high laser damage threshold of coating layer, Optical damage threshold (> 200 MW/cm<sup>2</sup>, Test by Quantel USA,)

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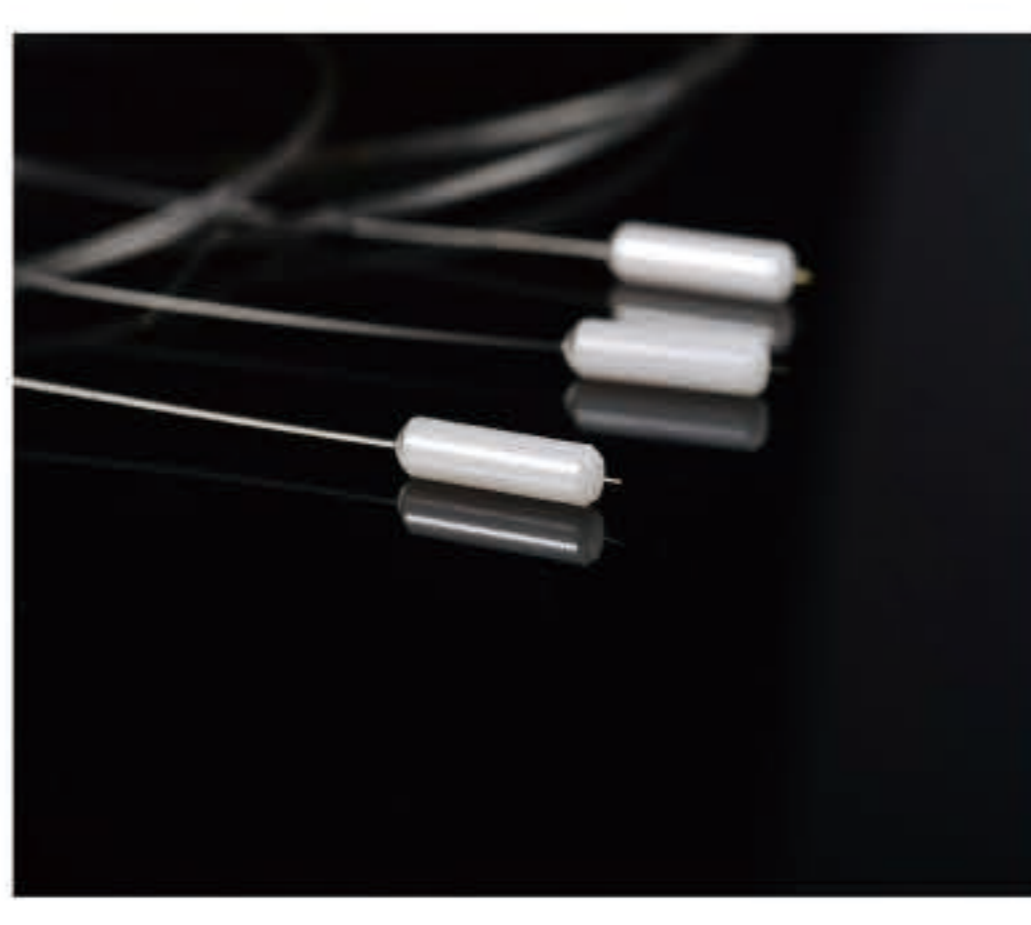
#### 主要参数

#### Product Parameter

光纤型号 Fiber Type	MM-S105/125-22A, Core/Clad:105/ 125um, 0.22NA;或客户指定 Customer Specified
光纤长度 Length of the fiber	200+/-10cm ; 或客户指定 Customize
镀膜参数 Coating Parameter	分光膜 Dichroic/Anti Reflection Coating , T>99%@900-980nm,R>99.5%@1050-1100nm ; 或客户定制 Customize
装配方式 Assembly Method	裸光纤镀膜后装配 SC 陶瓷插芯, 光纤头凸出插芯端面 install SC ceramic ferrule to the end of the coated bare fiber , and keep the fiber tip protruding from the ferrule tip.
光纤凸出长度 Protruding tip length	1+/-0.2mm ; 或客户指定 Customize
插芯类型 Fiber ferrule type	标准 SC 或 LC 陶瓷插芯 ; 或客户非标陶瓷插芯 , Standard SC or LC ceramic ferrule; or Customized ferrule

#### 产品图片

#### Product Image



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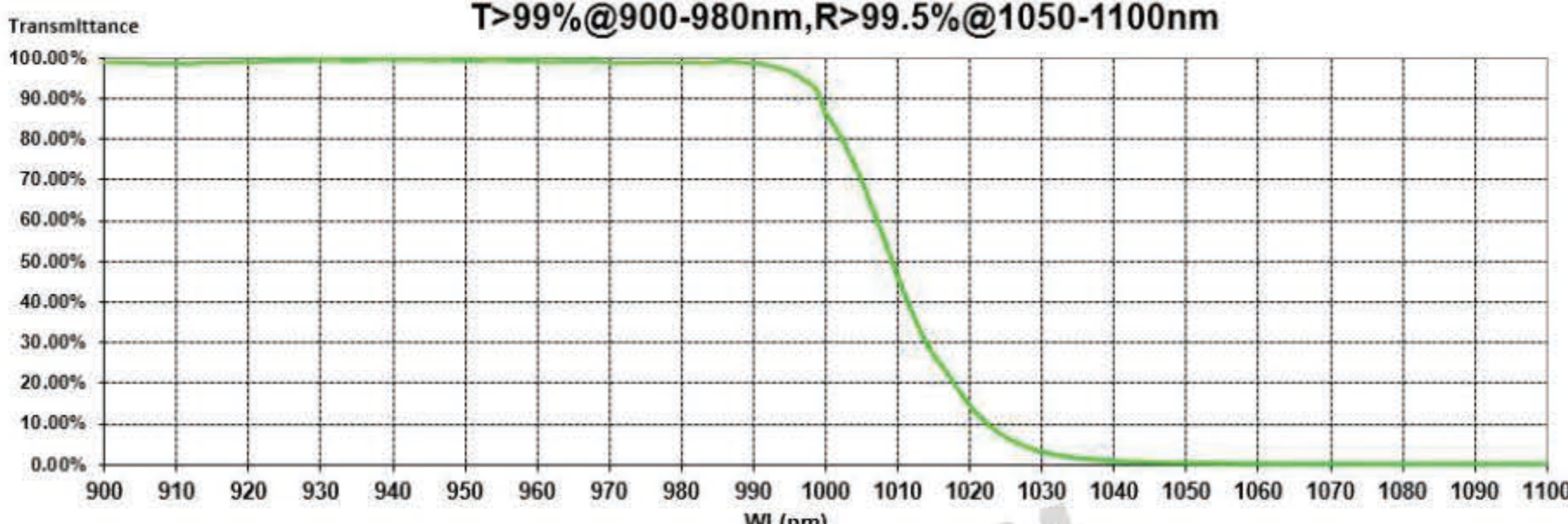
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#### 镀膜曲线

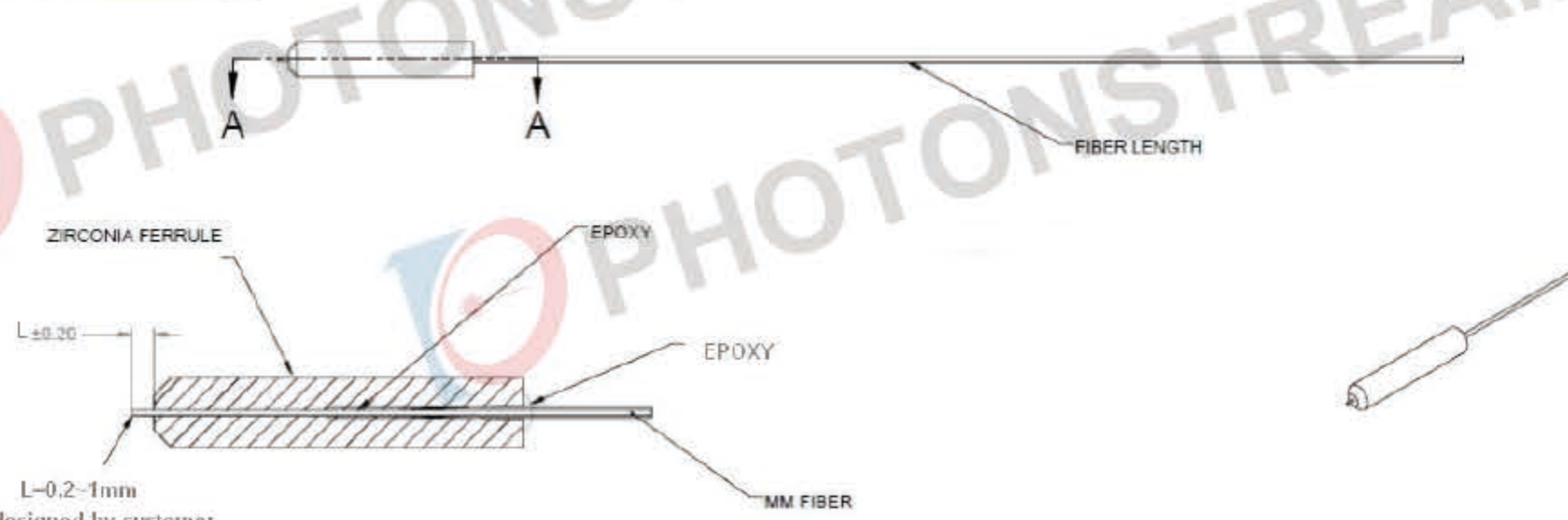
#### Coating Curve

DR Coating Witness Test Spectrum  
T>99%@900-980nm,R>99.5%@1050-1100nm



#### 产品图示

#### Product Outline



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