

## 850nm Single Mode Single Fiber Collimator

### Key Features

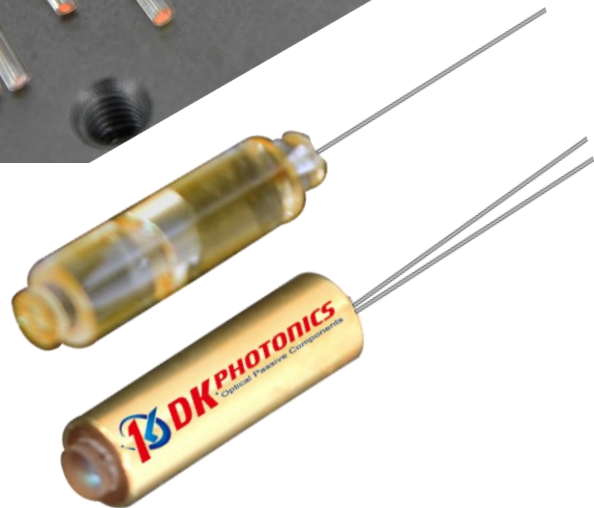
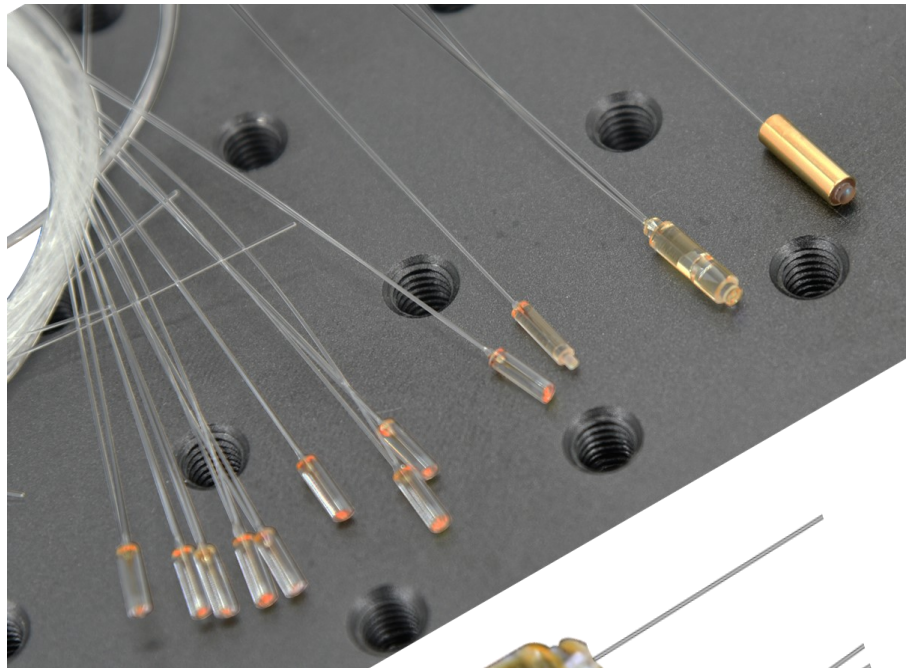
- Low Insertion Loss
- Low PDL
- Compact Design
- Wide Operating Wavelength
- High Reliability and Stability

The SM Single Mode Fiber Collimator is the basic element for in-line fiber optics components, such as optical isolator and optical WDM. It has high low insertion and high return loss. The unique processing and high quality AR coating also enable this collimator to handle high power.

If you do not see a standard Fiber Collimator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom Fiber Collimator. Requests for custom fiber pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed.

### Applications

- Isolators
- Circulators
- Switches
- WDM
- Signal Processing



## For more Info

### Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

E-mail: [sales@dkphotonics.com](mailto:sales@dkphotonics.com)

<https://www.dkphotonics.com>

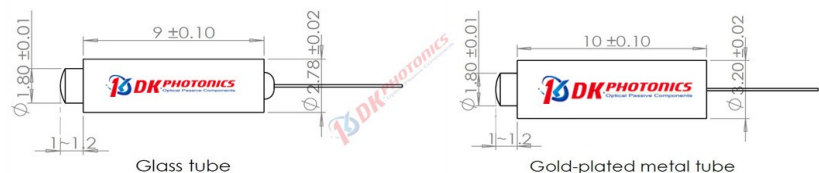
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

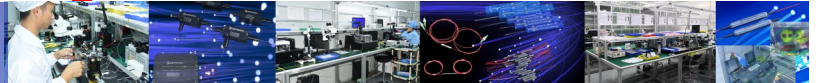
Dahe Road, Longhua Dis.,

Shenzhen, China 518109

### Package Dimension



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

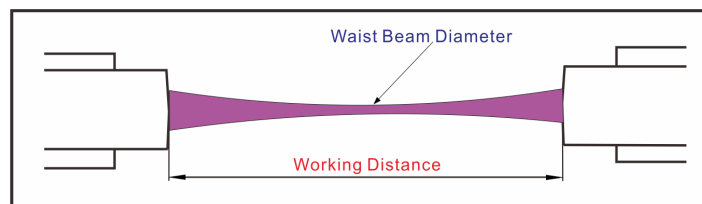


## 850nm Single Mode Single Fiber Collimator

### Performance Specifications

Parameter	Unit	Value		
Type	-	Standard		Long working distance
Operating wavelength ( $\lambda_c$ )	nm	780,850		
Operating wavelength range	nm	$\pm 30$		
Max. Working Distance	mm	20	50~100(C-lens)	
Grade	-	P	A	A
Max. Insertion Loss ( $\lambda_c$ )	dB	0.25	0.30	0.35
Waist Beam Diameter	mm	~0.35		~0.45
Min. Return Loss	dB	60	55	55
Fiber Type	-	780-HP		
Max. Power Handling	W	0.5, 1, 3, 5, 10		
Operating temperature	$^{\circ}\text{C}$	-5~+70		
Storage temperature	$^{\circ}\text{C}$	-40~+85		
Dimension	mm	$\Phi 2.78 \times 19$ (Glass tube)		
	mm	$\Phi 3.2 \times 10$ (Metal), $\Phi 1.4 \times 16$ (Metal)		

1. The specifications are w/o connector. Other lens sizes can also be customized according to requirements.
2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Power transmits through the connector less than 2W. Measured at the alignment wavelength at 1/2 working distance.
3. Waist Beam Diameter is measured at the alignment wavelength at 1/2 working distance.
4. When purchasing the collimator, please inform us whether it is used alone or in pairing. If paired, we will pack and ship the paired ones together.



### Order information P/N: COLL-S-①-②-③-④-⑤-⑥-⑦-⑧ (S: single fiber )

When you inquire, please provide the correct P/N number according to our ordering information and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250 $\mu\text{m}$  bare fiber pigtail.

①	②	③	④	⑤	⑥	⑦	⑧
Wavelength	Working Distance	Power Handling	Lens Type	Pigtails Diameter	Fiber Length	Connectors	Dimension
78:780nm	0: 0mm	L:<0.5W	C: C-lens	25:250 $\mu\text{m}$ bare fiber	10:1.0m	00: None	3.2x10
85:850nm	5: 5mm	1:1W	G: G-lens	90:900 $\mu\text{m}$ Loose Fiber	13:1.3m	FP: FC/PC	2.78x9
XX: Others	10:10mm	3:3W 5:5W		XX: Others	15:1.5m 20:2.0m XX: Others	FA: FC/APC SA: SC/APC LA: LC/APC XX: Others	

**Part Number Example:** COLL-S-85-5-L-C-25-10-00-2.78X9

**Description:** 850nm SM Single Fiber Collimator, 5mm working distance ,0.5W handling power, C lens, 780-HP fiber, bare fiber, 1.0m fiber length, and no connector, package dimension:2.78x9mm. Used alone.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.