



## Fiber Achromatic Collimator

I&Optics' fiber achromatic collimator can collimate two beams simultaneously even if the wavelengths are much different from each other. It features high transmission ratio, high power handling capability and excellent beam quality due to our unique technology. It can be used in lasers, industry, free space telecom, testing systems and R&D.

### Specification

Parameter	Test Condition	Unit	Value
Nominal Center Wavelength	-	nm	633, 850 , 980 , 1060 , 1310 , 1550 , 2000 or Specify
Wavelength Range	-	nm	+/-20 for 633/850/ 980/1060nm, others +/-50
Min. Transmission Ratio	Both Wavelengths	%	93, Typ. 95 for 2000nm, others 95, Typ. 97
Nominal Beam Diameter	at Beam Waist ( $1/e^2$ ), Longer Wavelength	mm	0.5, 0.8, 1.0, 2.0, 3.0, 5.0 or Specify
Max. Beam Pointing Accuracy	with Respect to Body	mrad	5
Max. Focal Length Difference	over Wavelength Range	mm	+/-0.5%
Min. Extinction Ratio	at 25°C, Input to Output, only for PM Fiber	dB	23, Typ. 25 (SC SM Fiber), 16, Typ, 18 (DC or LMA Fiber, Measurement Limited)
Min. Beam Ellipticity	at Both Wavelengths	%	92, Typ. 95
Min. Return Loss	at Both Wavelengths	dB	50
Max. Power Handling Rate	Continuous Wave	W	0.3, 1, 3, 5, 10, 20 or Specify
Fiber Type	-	-	Single Mode Fiber or LMA Fiber or Specify
Max. Fiber Tensile Load	-	N	5
Operating Temperature	-	°C	-5 to 70
Storage Temperature	-	°C	-40 to 85

Above values are for device without connectors. For device with connector, IL will be 0.3dB higher (0.5dB for 633/850nm), return loss will 5dB lower and handling power is only 1W (0.5W for 633/850nm).

The default alignment of working polarization and connector key are aligned to slow axis of fiber.

Package Dimensions

Detailed Informations And Dimensions Please Contact Us. Customized Design Is Available Upon Request.

### Ordering Informations

FAC-①-②-③-④-⑤-⑥-⑦

① - Center Wavelength (Both)	② - Waist Beam Diameter	④ - Fiber Type	⑤ - Connector Type
63 - 633nm	05 - 0.5mm	1 - SM 650 Fiber	1 - FC/UPC
85 - 850nm	08 - 0.8mm	2 - PM 630 Panda Fiber	2 - FC/APC
98 - 980nm	10 - 1.0mm	3 - Hi 780 Fiber	3 - SC/UPC
06 - 1060nm	20 - 2.0mm	4 - PM 850 Panda Fiber	4 - SC/APC
31 - 1310nm	30 - 3.0mm	5 - Hi 1060 Fiber	
55 - 1550nm	50 - 5.0mm	6 - PM 980 Panda Fiber	⑥ - Fiber Jacket
20 - 2000nm		7 - SMF-28e Fiber	B - Bare Fiber
SS - Specify	③ - Power Rate	8 - PM 1310 Panda Fiber	L - 900um Loose Tube
	0T - 0.3W	9 - PM 1550 Panda Fiber	3 - 3mm Amoured Cable
	01 - 1W		6 - 6mm Amoured Cable
	10 - 10W		
	20 - 20W		⑦ - Fiber Length
			0.8 - 0.8m