



High Power Variable Beam Collimator

I&Optics' high power variable collimator can collimate a divergent beam into 'parallel' beam and the beam diameter is variable. The long working distance is attributed to the collimating output beam. It features high handling power, excellent beam quality. 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	at Center Wavelength	%	95, Typ. 97 for 2000nm, others 97, Typ. 99
Nominal Beam Diameter	at Beam Waist (1/e ²)	mm	2.0, 3.0, 5.0, 6.0 or Specify
Beam Diameter Variable Range	at Beam Waist (1/e ³)	-	1~1.5 Times of Nominal Beam Diameter
Max. Beam Pointing Accuracy	with Respect to Body	mrad	4
Max. M ² Degradation	Input to Output @ 1/e ²	%	30, Typ. 20
Min. Extinction Ratio	at 25°C, Input to Output, only for PM Fiber	dB	22, Typ. 24 (SC Single Mode Fiber), 16, Typ, 18 (DC or LMA Fiber, Measurement Limited)
Min. Return Loss	at Center Wavelength	dB	55
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

HPVC-①-②-③-④-⑤-⑥-⑦

① - Center Wavelength

63 - 633nm

85 - 850nm

98 - 980nm

06 - 1060nm

31 - 1310nm

55 - 1550nm

20 - 2000nm

SS - Specify

② - Beam Diameter

2 - 2.0mm

3 - 3.0mm

4 - 4.0mm

5 - 5.0mm

③ - Power Rate

0T - 0.3W

01 - 1W

10 - 10W

④ - Fiber Type

1 - SM 650 Fiber

2 - PM 630 Panda Fiber

3 - Hi 780 Fiber

4 - PM 850 Panda Fiber

5 - Hi 1060 Fiber

6 - PM 980 Panda Fiber

7 - SMF-28e Fiber

8 - PM 1310 Panda Fiber

9 - PM 1550 Panda Fiber

⑤ - Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

⑥ - Fiber Jacket

B - Bare Fiber

L - 900um Loose Tube

3 - 3mm Amoured Cable

6 - 6mm Amoured Cable

⑦ - Fiber Length

0.8 - 0.8m