



## High Power Collimated Beam Isolator

I&Optics' high power collimated beam isolator can collimate a divergent beam into 'parallel' beam and propagate very high power through it and block the reversed light due to the embedded nonreciprocal Faraday element. The long working distance is attributed to the collimating output beam. It features high power handling capability, excellent beam quality and high isolation. It can be used in lasers, industry, free space telecom, testing systems and R&D.

### Specification

Parameter	Test Condition	Unit	Value	
Polarization Property	-	-	Insensitive	Sensitive
Nominal Center Wavelength	-	nm	633, 780, 850 or Specify	
Wavelength Range	-	nm	+/-30	
Min. Transmission Ratio	at Center Wavelength	%	92, Typ. 95	88, Typ. 90
Min. Isolation	at 23°C	dB	26, Typ. 32	
Polarization Dependent Loss	at 23°C, CWL	dB	Max. 0.2, Typ. 0.1	Min. 18, Typ. 20
Nominal Beam Diameter	at Beam Waist (1/e <sup>2</sup> )	mm	0.4, 0.5, 1.0, 2.0, 3.0, 5.0, 10 or Specify	
Max. Beam Pointing Accuracy	with Respect to Body	mrad	4	
Max. M <sup>2</sup> Degradation	Input to Output @ 1/e <sup>2</sup>	%	10	
Min. Extinction Ratio	at 25°C, Input to Output, only for PM Fiber	dB	23, Typ. 25 (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 0.5dB higher, return loss will 5dB lower and handling power is only 0.5W.

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

HPCI-①-②-③-④-⑤-⑥-⑦-⑧

① - Center Wavelength

63 - 633nm

78 - 780nm

85 - 850nm

SS - Specify

③ - Polarization Type

I - Insensitive

S - Sensitive

④ - Power Rate

0T - 0.3W

01 - 1W

03 - 3W

05 - 5W

10 - 10W

20 - 20W

⑤ - Fiber Type

1 - SM 650 Fiber

2 - PM 630 Panda Fiber

3 - Hi 780 Fiber

4 - PM 850 Panda Fiber

⑥ - Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

⑦ - Fiber Jacket

B - Bare Fiber

L - 900um Loose Tube

3 - 3mm Amoured Cable

6 - 6mm Amoured Cable

⑧ - Fiber Length

0.8 - 0.8m

② - Body Type

1 - Type 1

2 - Type 2

3 - Type 3

4 - Type 4