In-Line Isolators

Optical isolation devices integrated through fiber optic coupling

In-line isolators can be divided into two categories according to the fiber types: non-polarization-maintaining and polarization-maintaining inline isolators.

The non-polarization-maintaining type consists of birefringent crystals, Faraday rotator, half-wave plate or polarimeter, and collimators.

The polarization-maintaining type can achieve the steady transmittance of linear polarized light and remain the polarization state unchanged. It consists of input polarizer, Faraday rotator, half-wave plate, analyzer, and collimators.

CASTECH produces in-line isolators with high isolation, high power handling, high return loss, low insertion loss, excellent environmental stability and high reliability, operating in the wavelength range of 850~2000nm and withstand power can reach up to 500 W.The connection types of the fiber tail can be bare fiber or FC/APC.



Applications

- EDFA
- DWDM Systems
- Optical coherence detection
- Laser sensing
- Fiber communication

CASTECH's products are produced independently throughout the entire process and can be customized according to customer needs. Refer to the following list for standard products.

Non-Polarization-Maintaining Type Model Number: HPISO-t-p-f-λ-e-b-s-d-h

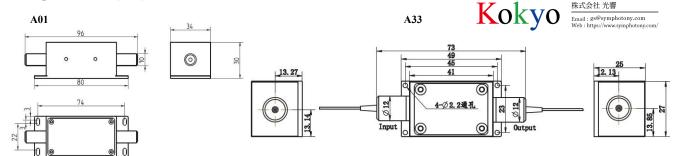
Type(t)	Power(p)	Fiber Type(f)	Wavelength (λ)	Pigtail Diameter(e)	Fiber Length(l)	Filter(b)	Housing (h)
IL (Common) ID (Dual stage)	0.3-500 W	1 (HI1060) 	980-1940 nm 	L (900 μm Loose Tube) B (3 mm Loose Tube)	1 (1 m) 2 (1.5 m) 	C (Contained) N (Not Contained)	A03 A08

Typical Specification

Withstand Power	Insertion Loss	Peak Isolation
5 W	<0.6 dB *, <0.8 dB **	>33 dB *, >50 dB **
100 W	<0.6 dB	>33 dB
500 W	<0.6 dB	>33 dB

^{*} Only applicable to single-stage isolator

Housing dimensions(mm):



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^{**}Only applicable to dual-stage isolator