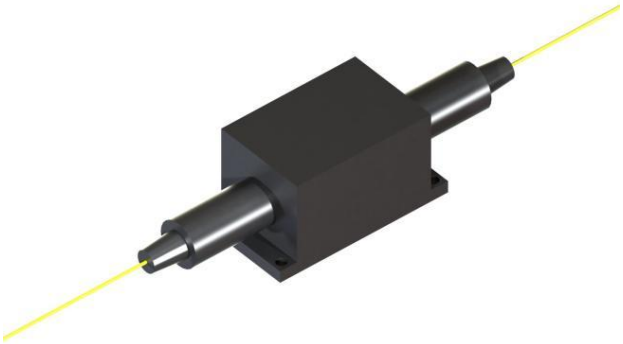
Polarization-maintaining optical isolator (single-stage) 1050nm 1W FC/APC



Product Description

Idealphotonics offers a broad range of fiber optic isolators within the 780-1310nm wavelength range. The isolators can be coupled with any single-mode fiber coupling equipment purchased from our company (such as lasers, SLDs, SOAs, and gain modules). In these cases, the devices feature isolators, and measurement reports show the performance of the OI output. The equipment can be spliced to prevent additional losses and feedback at the FC/APC connector. For fiber optic isolators in the 1060-1310nm wavelength range, a compact (55x5.5x5.5mm) light package is used, with a maximum input power of 300-500mW. In the shorter range (780-1055nm), a different material that absorbs less light power is used, and the OI is offered

in a significantly larger (up to 118x37x35) and heavy metal package. In high-power OIs, the same material is used to allow up to 1W input power.

Product features

High isolation、 Low insertion loss、 Fast axis blocked

Part Number

MP-ISO-F-1050-B-S-PA-1

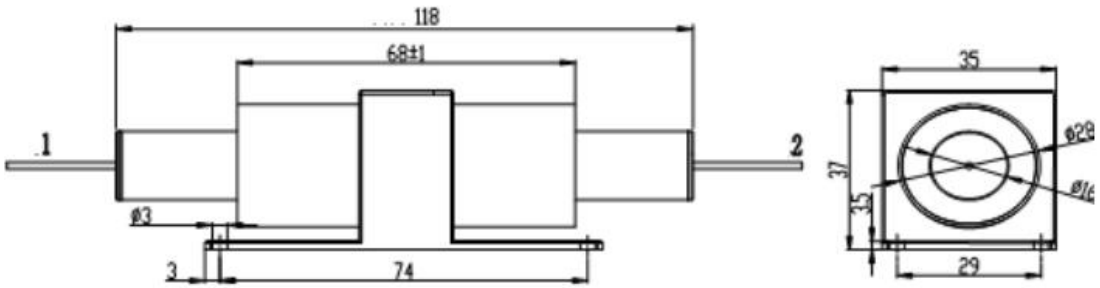
Application area

Light-sources isolation

Core parameters

Wavelength	Single/Double Stage	Isolation	Optical Power
1050nm	Single	50dB	1W

Dimension Drawing



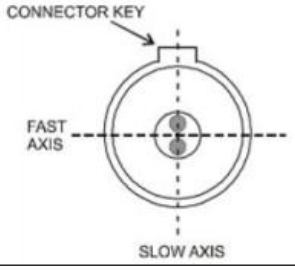
General Parameters

Specifications

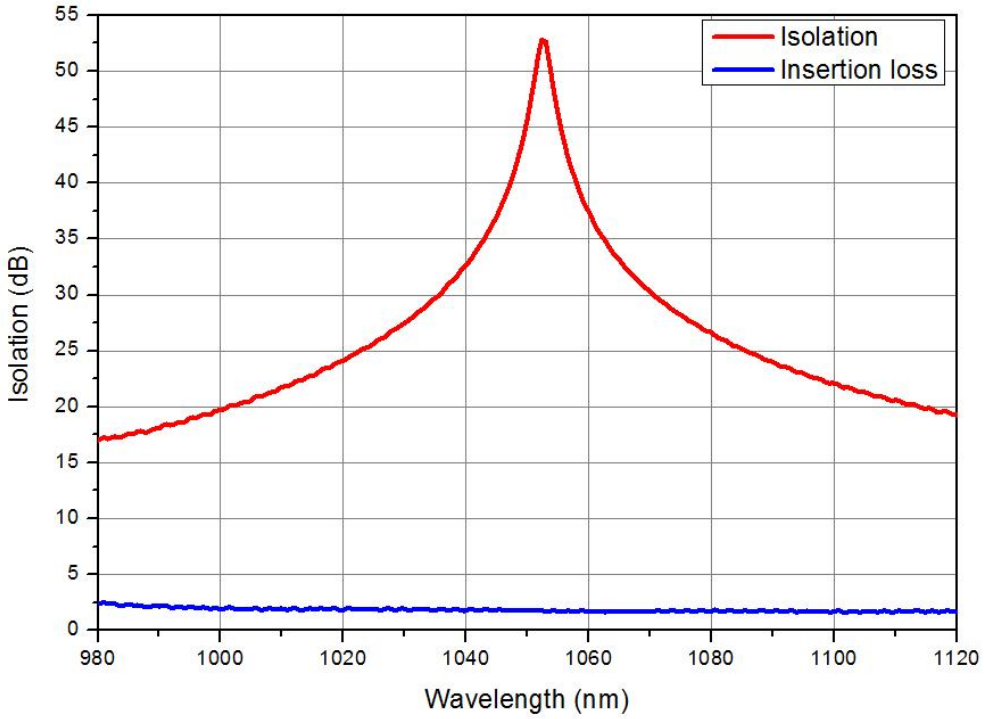
Parameter	Min.	Typ.	Max.	Unit
Single/Double Stage		Single		
Center Wavelength		1064		nm
Peak Isolation	35	50		dB
Insertion Loss		2	3	dB
Return Loss (Input/Output)	55/50			dB
Extinction Ratio	18	23		dB
Optical Power (CW)			1	W
Max Tensile Load			5	N
Operating Temperature	-5		50	°C
Storage Temperature	-40		85	°C

Fiber Specifications

Parameters	Panda PM980	Unit
Mode Field Diameter	6.6±1	μm
Cutoff Wavelength	920±50	nm
Cladding Diameter	125±1	μm
Coating Diameter	245±15	μm
Core to Cladding Offset	⩽0.5	μm
Length (per port)	1.0 ± 0.2	m
Connector	FC/APC	
Connector Alignment with Panda Fiber:		

Parameters	Panda PM980	Unit
		

General Parameters



Typical parameters of fiber optic isolators

*** @Max10mW Reverse optical power。**

Single/ Bipolar Stage	wavelength	Peak isolation*	insertion loss	Return Loss	extinction ratio	Input optical power(CW) (Direct optical power)	Fiber type	Package Size(LWH)

	nm	dB	dB	dB	dB	W		mm
single	780	30	1	50	20	0.3	PM780	91x27x28
single	808	30	1	50	20	0.3	PM780	91x27x28
single	850	35	1	50	20	0.3	PM850	91x27x28
single	980	35	1	50	20	0.3	PM980	91x27x28
single	1025	30	1.2	50	20	1	PM980	118x37x35
single	1025	30	1.2	50		1	HI1060	118x37x35
single	1030	26	1	50	20	1	PM980	118x37x35
single	1030	26	1	50		1	HI1060	118x37x35
single	1030	22	4.7	55	23	0.08	PM980	55×5.5×5.5
single	1030	22	4	55		0.08	HI1060	55×5.5×5.5
single	1040	35	1	50	20	1	PM980	118x37x35
single	1040	35	1	50		1	HI1060	118x37x35
single	1040	30	4.2	55	23	0.1	PM980	55×5.5×5.5
single	1040	30	4.2	55	23	0.1	PM980	55×5.5×5.5
single	1050	50	2.5	50	20	1	PM980	118x37x35
single	1050	40	2.9	55	23	0.15	PM980	55×5.5×5.5

single	1055	35	1	50	20	1	PM980	118x37x35
single	1055	35	1	50		1	HI1060	118x37x35
single	1055	40	2.6	55	23	0.2	PM980	55×5.5×5.5
single	1055	40	2.6	55		0.2	HI1060	55×5.5×5.5
single	1064	26	1	55		1-5	HI1060	35x5x5
single	1064	40	1.8	55	23	0.3	PM980	55×5.5×5.5
single	1064	40	1.8	55		0.3	HI1060	55×5.5×5.5
double	1064	55	3.2	55	20	0.3	PM980	55×5.5×5.5
single	1085	35	1	50	20	1	PM980	118x37x35
single	1085	35	1	50		1	HI1060	118x37x35
single	1085	30	1.8	55	23	0.3	PM980	55×5.5×5.5
single	1085	30	1.8	55		0.3	HI1060	55×5.5×5.5
single	1095	30	1	50	20	1	PM980	118x37x35
single	1095	30	1	50		1	HI1060	118x37x35
single	1085	28	1.8	55	23	0.3	PM980	55×5.5×5.5
single	1085	28	1.8	55		0.3	HI1060	55×5.5×5.5
single	1120	30	1.7	50	21	0.3	PM980	55×5.5×5.5

double	1120	40	2.8	50	21	0.3	PM980	55×5.5×5.5
single	1150	20	2	55	20	0.3	PM980	55×5.5×5.5
double	1150	30	2.8	55	20	0.3	PM980	55×5.5×5.5
double	1178	25	2	50	20	0.35	PM980	55×5.5×5.5
double	1188	20	2.1	50	20	0.35	PM980	55×5.5×5.5
double	1250	30	1.2	55	23	0.4	PM980	55×5.5×5.5
double	1310	58	0.6	55	23	0.5	PM1300	55×5.5×5.5