

PM Optical Isolator (Single-Stage) 780nm

500mW FC/APC



● Product Description

Idealphotonics offers a broad portfolio of fiber isolators in the 780-1310nm wavelength range. These isolators can be provided with any single-mode fiber-coupled device (laser, SLD, SOA, gain module) purchased from our company. In such cases, the device is characterized with the isolator, and the measurement report reflects the performance at the OI output. The equipment can be spliced to avoid additional loss and feedback at the FC/APC connector. For the 1060-1310nm wavelength range, the fiber isolator features a compact (55x5.5x5.5mm) lightweight package with a maximum input power of 300-500mW. In the shorter range (780-1055nm), due to the use of a different material with lower optical power absorption, the OI is offered in a significantly larger (up to 118x37x35mm) and heavier

metal package. The same material is used in high-power OIs to achieve input powers of up to 1W input power.

● Product features

High isolation、 Low insertion loss、 Fast axis blocked

● Part Number

MP-ISO-F-780-A-S-PA-1

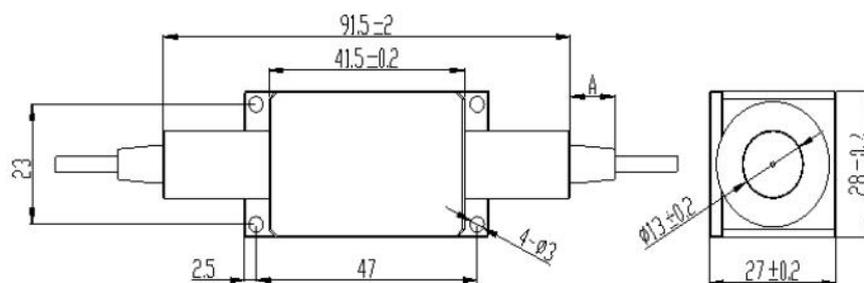
● Application area

Light-sources isolation

● Core parameters

Wavelength	Single/Double Stage	Isolation	Optical Power
780nm	Single	30dB	0.5W

● Dimension Drawing



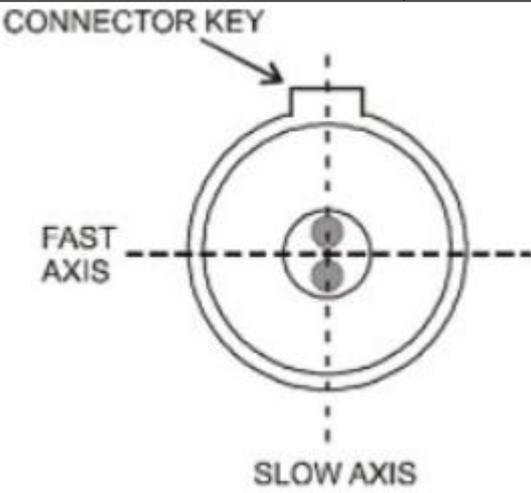


● General Parameters

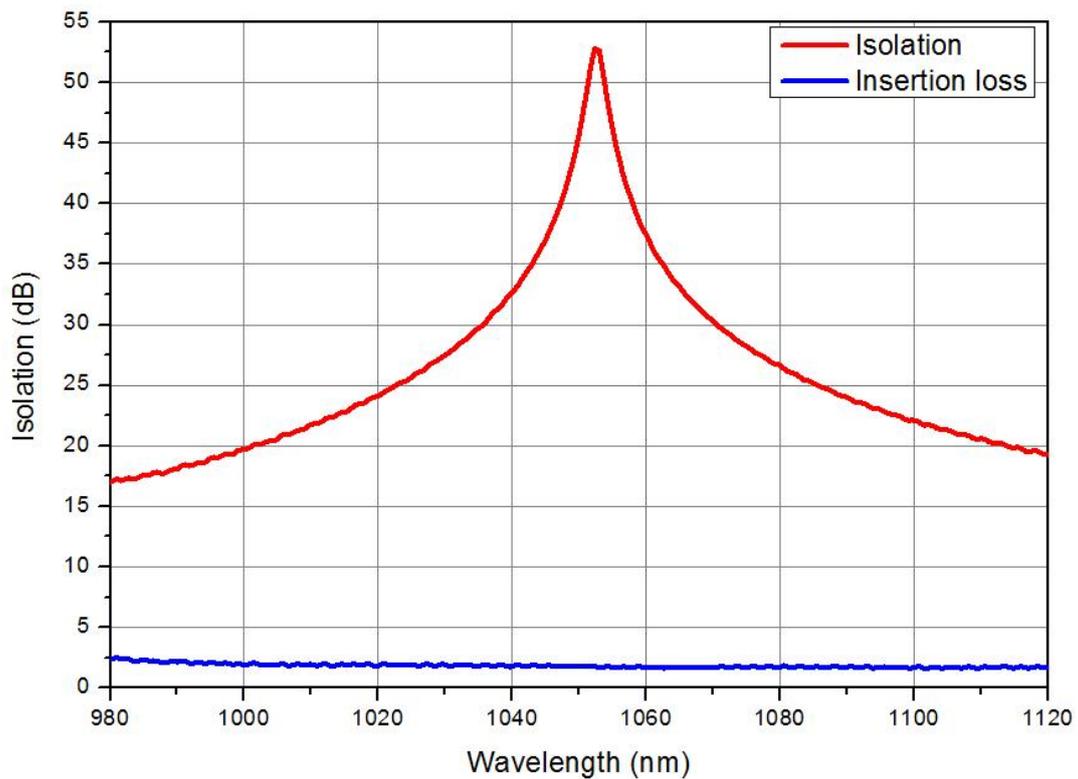
Parameters

Specs				
Parameters	Min	Typ.	Max	Unit
Single/Dual Stage		Single		
Center Wavelength		780		nm
Peak Isolation	25	35		dB
Insertion Loss		0.5	1.3	dB
Return Loss (Input/Output)	45/45	50/50		dB
Extinction Ratio	20			dB
Optical Power (CW)			500	mW
Maximum Tensile Load			5	N
Operating Temperature	-5		50	°C
Storage Temperature	-40		75	°C

Parameters	Panda PM850	Unit
Mode Field Diameter	5.5±0.5	μm
Cutoff Wavelength	650-800	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 Type	FC/APC	
Connector aligned with panda fiber:		

Parameters	Panda PM850	Unit
		

General Parameters



Typical parameters of fiber optic isolators

* @Max10mW Reverse optical power.



Single/ Bipolar Stage	wavel ength	Peak isolat ion*	inserti on loss	Retur n Loss	extinc tion ratio	Input optical power(CW) (Direct optical power)	Fiber type	Package Size(LWH)
						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