

# 1053nm High Power Optical Isolator

## FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

## APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks

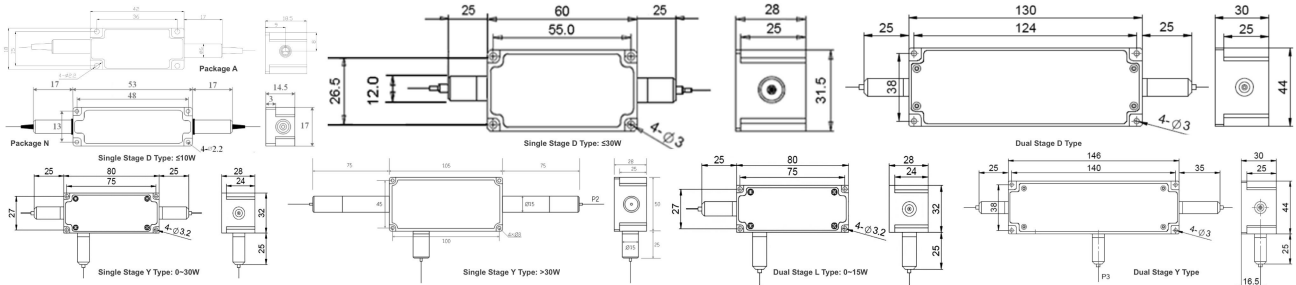


## SPECIFICATIONS

Parameter	Unit	Single Stage	Dual Stage D Type	Dual Stage L Type
Center Wavelength ( $\lambda_c$ )	nm	1053		
Operating Wavelength Range	nm	+/-10		
Peak Isolation (Typ.)	dB	28	46	
Min. Isolation (23°C)	dB	22	40	
Typical Insertion Loss ( $\lambda_c$ , 23°C)	dB	0.8	1.0	1.2
Max. Insertion Loss ( $\lambda_c$ , 23°C)	dB	1.5	1.7	
Optical Return Loss (Input/Output)	dB	50/50		
Max. Polarization Dependent Loss	dB	0.15		
Configuration	-	Standard: 2-Port; Y Type: 3-Port, Backward Power Guide Out		
Fiber Type	Input&Output	-	HI1060 Fiber or 10/125um SC Fiber (E) 10/125um DC Fiber (O), 15/130um DC Fiber (W) 20/130um DC Fiber (Q) or 25/250um DC Fiber (R)	
	3 <sup>rd</sup> Port (Y Type)	-	Same Fiber or 105/125um MM Fiber	
Fiber Tensile Load	N	5		
Maximum Optical Power (CW)	W	0.3, 0.5, 1, 2, 3, 5, 10, 15, 20, 30, 40, 50, 60, 80, 100, 150, 200		
Max. Backward Optical Power (CW)	W	0.3, 0.5, 1, 2, 3, 5, 10		
Operating Temperature	°C	0~50		
Storage Temperature	°C	-20~75		

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.5dB higher, RL is 5dB lower.
  - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  - Suggest to use Y type for >20W Optical Power or backward power of  $\geq 500\text{mW}$ .
  - Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.
  - Package dimensions may be different for different fiber type, configuration and optical power.

## PACKAGE DIMENSION



## ORDERING INFORMATION (PN)

FISO- NNNN	(C)	(C)	-HP NN	(NN)	(C)	C	NN	- CC/CCC
Center Wavelength	Stage	3 <sup>rd</sup> Port Fiber	Optical Power	Backward Power	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
1053-1053nm	D-D Type	Y- Same Fiber	1-1W	05-500mW	E=10/125um SC Fiber	B- Bare Fiber	05-0.5m	N-Without Connector
	L-L Type	A=105/125um Fiber	3-3W	1-1W	Q=20/130um DC Fiber	L- Loose Tube	10-1.0m	FC/APC=FC/APC Connector
	N= Package N	Blank for Standard	10-10W	10-10W	R=25/250um DC Fiber	2- 2mm Cable	15-1.5m	LC/PC=LC/PC Connector
	Blank for Single		100-100W	Blank for 300mW	Blank for HI1060 Fiber	3- 3mm Cable	20-2.0m	SC/UPC=SC/UPC Connector

