

2050/1570nm SM WDM/Tap Coupler/Isolator Hybrid Combination

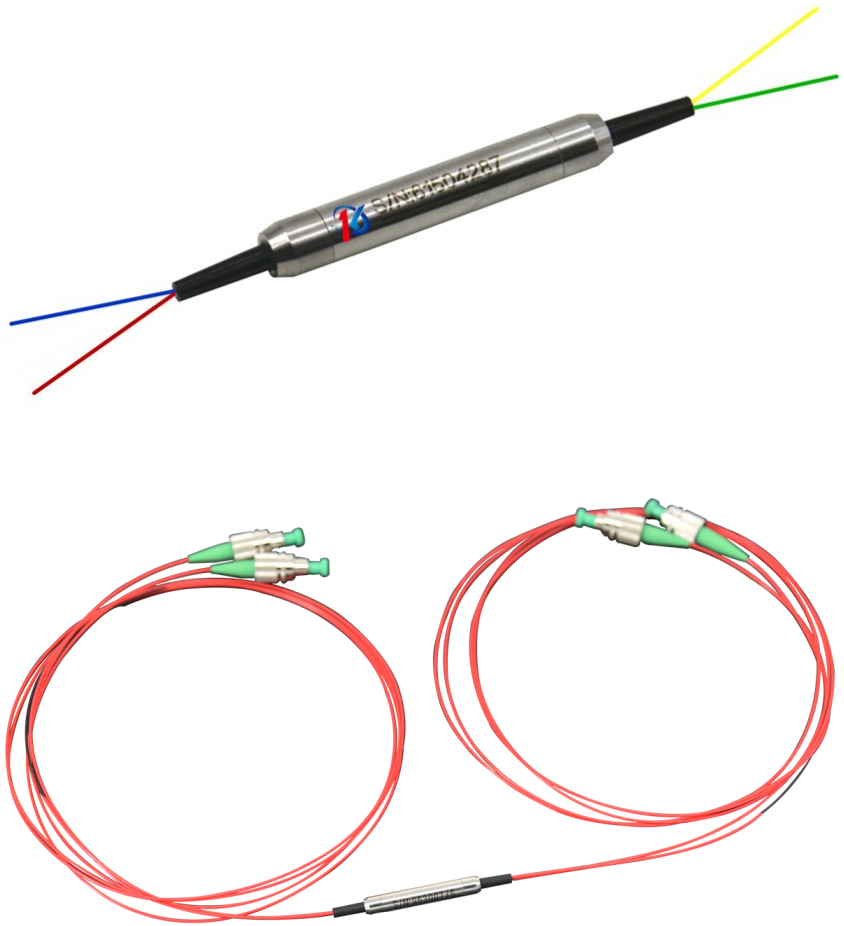
Key Features

- Compact Size
- Low insertion loss
- High channel Isolation
- High stability and reliability

DK Photonics' WDM/Tap Coupler/Isolator Hybrid Combination is a combination of a wavelength division multiplexer, tap coupler and an isolator in a compact package. This product has an extremely low insertion loss, a very stable tap-coupling ratio, high isolation, and high return loss. This product offers integrated solution to fiber laser application by combining more functions into a very compact package.

Applications

- Fiber laser
- Fiber amplifier
- Communications
- Laboratory R&D



For more Info

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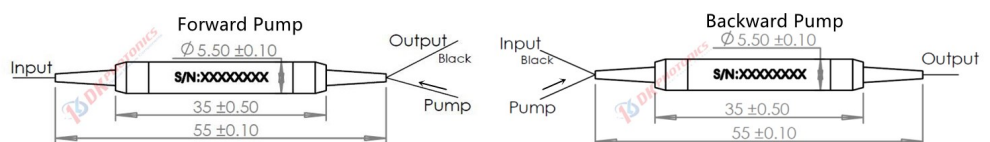
E-mail: sales@dkphotonics.com

<https://www.dkphotonics.com>

Add.:

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Dahe Road, Longhua Dis.,
Shenzhen, China 518109

Package Dimension:



PS: For forward pump, signal wavelength is polarization independent. For backward pump, signal wavelength is Polarization dependent

*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

Performance Specifications

Parameter	Unit	Values	
Stage of Isolator	-	Single Stage	Dual Stage
Signal Central Wavelength (λ_c)	nm	1940, 2000, 2050	
Max. Signal Excess Loss, $\lambda_c \pm 20$ nm, @ 23°C	nm	2.0	2.3
Min. Signal Isolation, $\lambda_c \pm 50$ nm, @ 23°C (Isolator)	nm	16	35
Tap Ratio	%	1~50	
Tap Channel Typ. Loss	dB	1%(20~22.5), 5%(14 ~ 16.5)	
Min. Isolation (WDM)	Signal Channel	25	
	Pump Channel	12	
Pump Wavelength Range	nm	1520~1590	
Max. Insertion Loss (Pump to Common)	dB	1.0	
Max. PDL	dB	0.2	
Min. Return Loss	dB	50	
Max. Power Handling (CW)	W	0.5, 2, 3, 10	
Max. Peak Power for ns Pulse if any	kW	1, 5, 10	
Max. Tensile Load	N	≤5	
Fiber Type	Pump port	SMF-28e fiber or specified	
	Common Signal and tap port	SM1950 fiber or specified	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	
Package Dimensions	mm	Ø5.5 x L38(<5W), 60x12x8(>5W)	

- Above specifications are for device without connector.
- For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Power transmits through the connector less than 2W.
- If there is pulse application, please be sure to inform us of pulse energy and peak power.

Order information P/N: WTIH-①-②-③-④-⑤-⑥-⑦

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250 μ m bare fiber pigtail.

①	②	③	④	⑤	⑥	⑦	⑧
Wavelength	Stage of Isolator	Optical Power	Tap Ratio	Pump Configuration	Pigtail Diameter	Fiber Length	Connector
5057:2050 signal/1570 pump XX: other	S: Single Stage U: Dual Stage	L:<0.5W 1:1W 3:3W 5:5W 10:10W	01:1% Tap 02:2% Tap 05:5% Tap	F: Forward Pump B: Backward Pump	25:250 μ m Bare Fiber 90:900 μ m Loose Fiber XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC SA: SC/APC LA: LC/APC XX: Others

Part Number Example: WTIH-5057-S-L-01-F-90-10-FA

Description: SM WDM/Tap Coupler/Isolator Hybrid Combination, 2050nm signal/1570nm pump, single stage isolator, 1% tap, forward pump, SMF-28e fiber at 1570nm port, other with SM1950 fiber, with 0.9mm OD loose tube, 1.0m fiber length, and FC/APC connectors at all ports.

Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.