# SM Hybrid Components



## **Key Features**

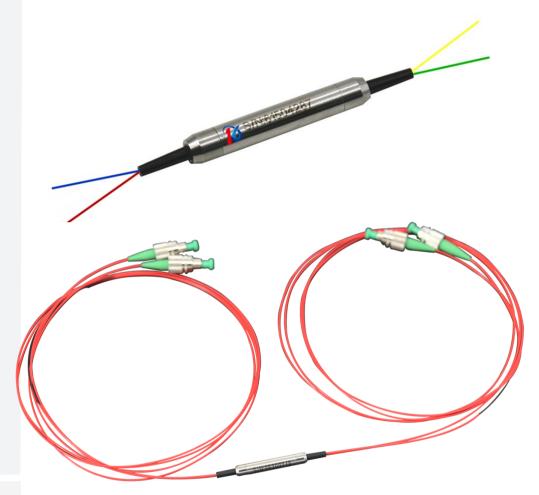
- Compact Size
- Low insertion loss
- High channel Isolation
- High Extinction Ratio
- High stability and reliability

# Applications

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

## 980/1550nm SM WDM/Tap Coupler Hybrid Combination

DK Photonics' WDM/Tap Coupler Hybrid Combination is a combination of a wavelength division multiplexer and tap coupler in a compact package. All input and output fibers are polarization maintaining. 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 amplifier application by combining more functions into a very compact package.



# For more Info

### Please contact us at:

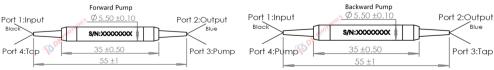
Tel: +86-755-23736280 Fax: +86-755-26746512

E-mail: sales@dkphotonics.com https://www.dkphotonics.com

#### Add.:

4F, Bldg. 18, Qinghu Industrial Park, 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.

Email: sales@dkphotonics.com





### 980/1550nm SM WDM/Tap Coupler Hybrid Combination

### **Performance Specifications**

Parameter		Unit	Values	
Signal Central Wavelength (λ c)		nm	1550, 1590	
Signal Wavelength Range		nm	1528~1565(C Band), 1570~1605(L Band)	
Max. Excess Loss, λ c, @ 23°C		nm	1.0	
Tap Ratio		%	1~50	
Tap Channel Typ. Loss		dB	1%(19.0~21.0), 2%(16.2 ~ 19.0), 5%(12.2 ~ 15.0)	
Min. Isolation (WDM)	Signal Channel	dB	30	
	Pump Channel	dB	12	
Pump Wavelength Range		nm	960~990	
Max. Insertion Loss (Pump to Common)		dB	0.6	
Max. PDL		dB	0.1	
Min. Return Loss		dB	50	
Max. Power Handling (CW)		W	0.5, 2, 3, 10	
Max. Peak Power for Pulse		kW	1, 5,10	
Max. Tensile Load		N	≤5	
Fiber Type		-	1060-XP or Specified for Common & Pump port	
			SMF-28e or Specified for Signal and tap port	
Operating Temperature		°C	-5 to +70	
Storage Temperature		$^{\circ}\mathrm{C}$	-40 to +85	
Package Dimensions		mm	Ø5.5 x L35	

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

## Order information P/N: WTH -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 250µm bare fiber pigtail.

1	2	3	4	5	6	7
Wavelength	Optical Power	Tap Ratio	Pump Configuration	Pigtail Diameter	Fiber Length	Connector
59:1550 signal/980 pump	L:<0.5W 2:2W 5:5W 10:10W	01:1% Tap 02:2% Tap 05:5% Tap	F: Forward Pump B: Backward Pump	25:250μm bare fiber 90:900μm Loose Fiber XX: Others	05:0.5m 10:1.0m 15:1.5m XX: Others	00: None FP: FC/PC FA: FC/APC SP: SC/PC SA: SC/APC XX: Others

Part Number Example: WTH-59-L-01-F-90-10-FA

**Description:** SM WDM/Tap Coupler Hybrid Combination, 1550nm signal/980nm pump, 1% tap, forward pump, 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.