# SM Hybrid Components



## **Key Features**

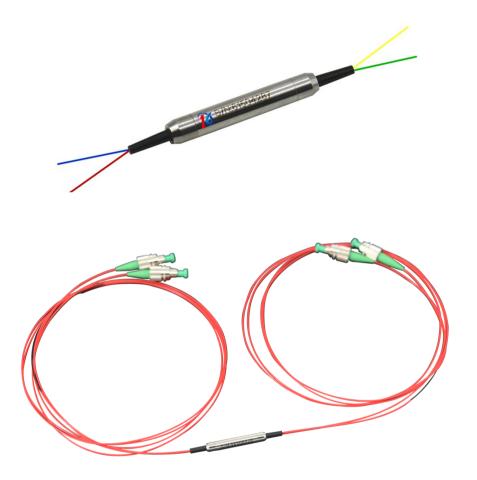
- Compact Size
- Low insertion loss
- High channel Isolation
- High Extinction Ratio
- High stability and reliability

# Applications

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

### 980/1040nm 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

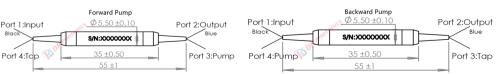
https://www.dkphotonics.com

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





#### 980/1030nm SM WDM/Tap Coupler Hybrid Combination

### **Performance Specifications**

Parameter		Unit	Values	
Signal Central Wavelength (λ c)		nm	1030, 1040, 1064	
Signal Wavelength Range		nm	1025~1080	
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	25 12	
	Pump Channel	dB		
Pump Wavelength Range		nm	960~990	
Max. Insertion Loss (Pump to Common)		dB	0.7	
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	
Operating Temperature		$^{\circ}\mathrm{C}$	-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	<b>5</b>	6	7
Wavelength	Optical Power	Tap Ratio	Pump Configuration	Pigtail Diameter	Fiber Length	Connector
49:1040 sig-	L:<0.5W	01:1% Tap	F: Forward Pump	25:250µm bare	05:0.5m	00: None
nal/980 pump	2:2W	02:2% Tap	B: Backward Pump	fiber	10:1.0m	FP: FC/PC
39:1030 sig-	5:5W	05:5% Tap		90:900µm Loose	15:1.5m	FA: FC/APC
nal/980 pump	10:10W			Fiber	XX: Others	SP: SC/PC
69:1064 sig-				XX: Others		SA: SC/APC
nal/980 pump						XX: Others

Part Number Example: WTH-49-L-01-F-90-10-FA

**Description:** SM WDM/Tap Coupler Hybrid Combination, 1040nm 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.