

## 1590 980nm High Power SM Tap Isolator WDM Hybrid

1590 980nm High Power SM Tap Isolator WDM Hybrid is a fiber passive component which integrated with the function of Tap Filter Coupler, Optical Isolator and WDM, Tap Coupler can separate the signal power for monitoring, Optical Isolator for avoiding the backward reflection light, WDM can combine pump light and signal light. It's widely used in EDFA and Fiber Amplifier application, higher power type is available upon request.

### Application:

Fiber Laser  
EDFA  
Raman Amplifier  
Lab And Research

### Features:

Compact Package  
High Isolation  
Low Insertion Loss  
High Reliability



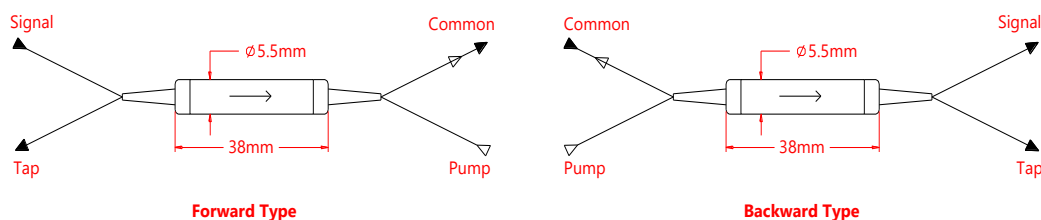
### Specification:

| Parameter                                            |                                     |    | Symbol | Value                                                                       |            | Unit |
|------------------------------------------------------|-------------------------------------|----|--------|-----------------------------------------------------------------------------|------------|------|
| Signal Wavelength                                    |                                     |    | λ      | 1590 (1530-1605)                                                            |            | nm   |
| Pump Wavelength                                      |                                     |    | λ      | 980 (960-1000)                                                              |            | nm   |
| Isolator Stage                                       |                                     |    |        | Single Stage                                                                | Dual Stage | -    |
| Min. Isolation @Signal (Com to Signal Port), all SOP |                                     |    | Iso    | 30                                                                          | 40         | dB   |
| Min. Wavelength Isolation                            | Signal Channel @Pump for Signal→Com |    | Iso    | 25                                                                          |            | dB   |
|                                                      | Pump Channel @Signal for Pump→Com   |    | Iso    | 15                                                                          |            | dB   |
| Max. Insertion Loss                                  | Signal Channel EL for Signal→Com    |    | EL     | 1.4                                                                         |            | dB   |
|                                                      | Pump Channel for Pump→Com           |    | IL     | 0.6                                                                         |            | dB   |
|                                                      | Tap Channel for Signal→Tap          | 1% | IL     | 19.2-23.0                                                                   |            | dB   |
|                                                      |                                     | 2% | IL     | 16.2-18.5                                                                   |            | dB   |
|                                                      |                                     | 5% | IL     | 12.2-14.5                                                                   |            | dB   |
| Max. Polarization Dependent Loss                     |                                     |    | PDL    | 0.1                                                                         | 0.2        | dB   |
| Max. Polarization Mode Dispersion                    |                                     |    | PMD    | 0.25                                                                        | 0.1        | ps   |
| Min. Return Loss                                     |                                     |    | RL     | 50                                                                          |            | dB   |
| Min. Directivity                                     |                                     |    |        | 55                                                                          |            | dB   |
| Max. Optical Power (CW)                              |                                     |    | P      | 0.5, 1, 3, 5 or customized                                                  |            | W    |
| Max. Tensil Load                                     |                                     |    |        | 5                                                                           |            | N    |
| Fiber Type                                           |                                     |    |        | SMF-28e for Com, Tap and Signal, HI 1060 or SMF-28e for Pump, or customized |            | -    |
| Operating Temperature                                |                                     |    | T      | 0~70                                                                        |            | ℃    |
| Storage Temperature                                  |                                     |    | T      | -40~85                                                                      |            | ℃    |
| Package Dimension                                    |                                     |    |        | Φ5.5×L38                                                                    |            | mm   |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower. Connectors only 1W CW guarantee.

### Drawing:



### Ordering Information (Part Number):

| HSTIW- <b>WWW</b> - <b>P</b> - <b>S</b> - <b>TT</b> - <b>HH</b> - <b>FF</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |                   |                  |              |                |                         |                 |              |              |
|----------------------------------------------------------------------------------------------------------------|-------------------|------------------|--------------|----------------|-------------------------|-----------------|--------------|--------------|
| <b>WWW</b>                                                                                                     | <b>P</b>          | <b>S</b>         | <b>TT</b>    | <b>HH</b>      | <b>FF</b>               | <b>J</b>        | <b>LL</b>    | <b>CC</b>    |
| Wavelength (Signal/Pump)                                                                                       | Pump Type         | Stage            | Tap Ratio    | Handling Power | Fiber Type on Pump Port | Fiber Jacket    | Fiber Length | Connector    |
| 5598 - 1550/980nm                                                                                              | F - Forward Pump  | S - Single Stage | 01 - 1%      | Z5 - 0.5W      | H1 - HI 1060            | B - 250um Bare  | 05 - 0.5m    | NE - None    |
| 5698 - 1560/980nm                                                                                              | B - Backward Pump | D - Dual Stage   | 02 - 2%      | 01 - 1W        | S2 - SMF-28e            | Fiber           | 10 - 1.0m    | FA - FC/APC  |
| 5798 - 1570/980nm                                                                                              |                   |                  | 03 - 3%      | 03 - 3W        | SS - Specify            | 9 - 900um Loose | 15 - 1.5m    | FU - FC/UPC  |
| 5898 - 1580/980nm                                                                                              |                   |                  | 05 - 5%      | 05 - 5W        |                         | Tube            | 20 - 2.0m    | SS - Specify |
| 5998 - 1590/980nm                                                                                              |                   |                  | 10 - 10%     | SS - Specify   |                         |                 |              |              |
| SSSS - Specify                                                                                                 |                   |                  | SS - Specify |                |                         |                 |              |              |