

# 0305 1310 nm to 1610 nm WDM

W1029-S



## 1x2 1559.39 nm Filter

This WDM based pump/signal combiner utilizes thin-film filter technology to combine the pump power with the input signal. It features low insertion loss, low PDL, and negligible PMD. This device is used for building broadband, low-noise EDFAs and raman amplifiers for ultra-long haul networks. It is housed in a high-power handling metal package.

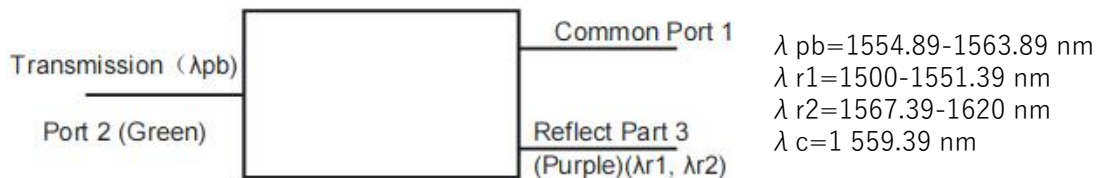
### FEATURES

- Low Insertion Loss
- Low PDL
- Negligible PMD
- High Stability and Reliability

### USE IN

- Building Broadband
- Low-noise EDFAs
- Raman Amplifiers for Ultra-long Haul Networks

### FUNCTIONAL DIAGRAM



$\lambda_{pb}$ =1554.89 to 1563.89 nm  $\lambda_{r1}$ =1500 to 1551.39 nm  
 $\lambda_{r2}$ =1567.39 to 1620 nm  $\lambda_c$ =1559.39 nm

Insertion Loss	Port 1-2 @ $\lambda_{pb}$	0.29 dB
Flatness	Port 1-2 @ $\lambda_{pb}$	0.06 dB
Isolation	Port 1-2 @ $\lambda_{r1}$	31.5 dB
Isolation	Port 1-2 @ $\lambda_{r2}$	27.1 dB
Transmission Bandwidth @ 0.15 dB		10.16 dB
Transmission Bandwidth @ 20.0 dB		14.33 dB
Insertion Loss	Port 1-3 @ $\lambda_{r1}$	0.31 dB
Insertion Loss	Port 1-3 @ $\lambda_{r2}$	0.32 dB
Flatness	Port 1-3 @ $\lambda_{r1}$	0.07 dB
Flatness	Port 1-3 @ $\lambda_{r2}$	0.04 dB
Isolation	Port 1-3 @ $\lambda_{pb}$	23.4 dB
Insertion Loss	Port 1-2 @ $\lambda_c$	0.25 dB
Insertion Loss	Port 1-3 @ $\lambda_c$ -10 nm	0.27 dB
Insertion Loss	Port 1-3 @ $\lambda_c$ +10 nm	0.30 dB

**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.  
**1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.**  
**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**