

# WD5943

## RFoG 4-Band multiplexer 1550, 1590 & 1310/1490nm MWDM

### PRODUCT DESCRIPTION

WD5943 WDM is based on mature thin film filtering tech, with wide bandwidth, flatness, low insertion loss and high isolation. It is mainly applied to FTTx PON network to achieve the combination and separation of the 1550nm (CATV) and 1310/1490nm (data).

### PRODUCT FEATURE

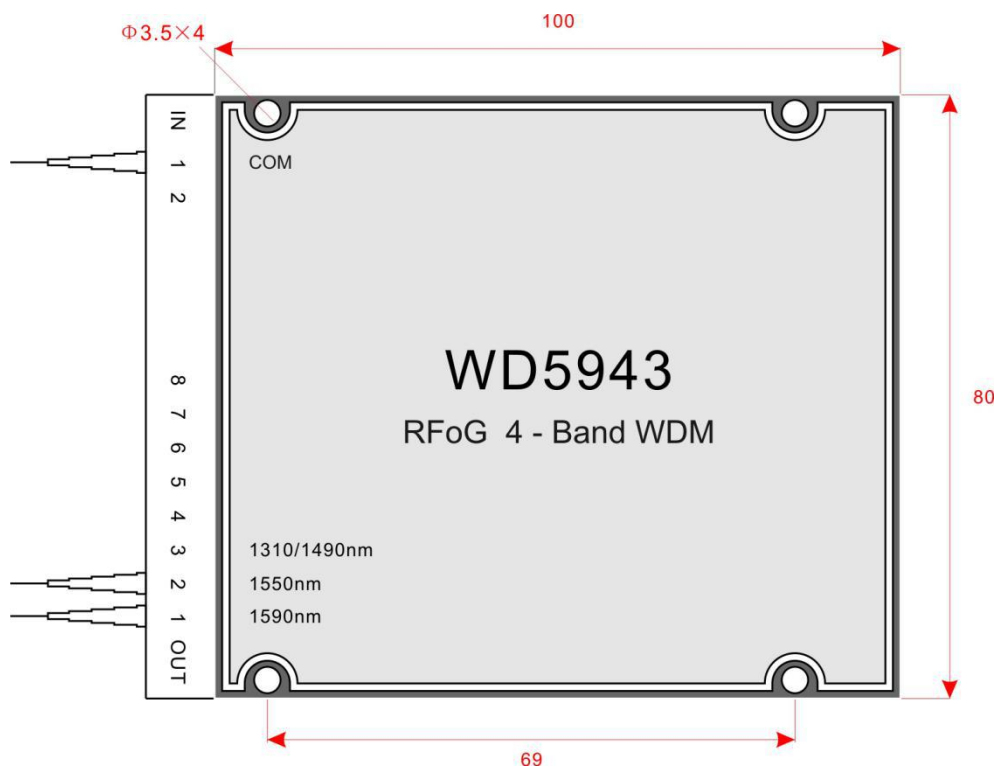
- ▶ Low insertion loss
- ▶ High channel isolation
- ▶ High band flatness
- ▶ High stability and reliability

### MAIN APPLICATION

- ▶ RFoG FTTx PON (EPON, GPON)
- ▶ Triple-play



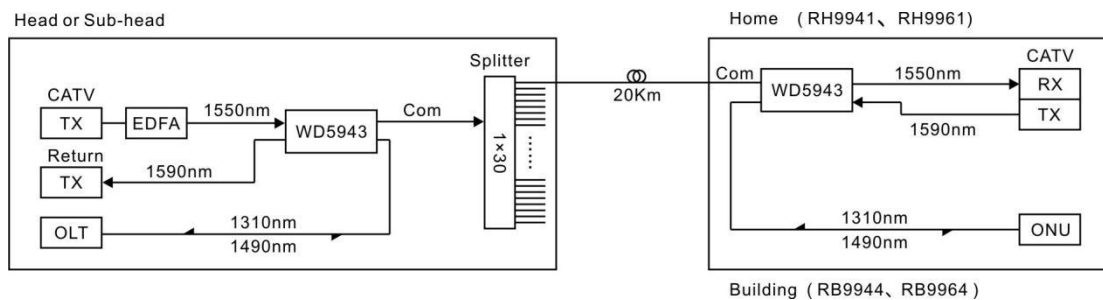
### EXTERIOR DIMENSION - M EXTERIOR



## TECHNIQUE INDEX

| Performance             |             |      | Index                               |           |           | Supplement    |
|-------------------------|-------------|------|-------------------------------------|-----------|-----------|---------------|
|                         |             |      | Min.                                | Typ.      | Max.      |               |
| Transmission wavelength | $\lambda_1$ | (nm) | 1540                                | 1550      | 1565      |               |
|                         | $\lambda_2$ |      | 1580                                | 1590      | 1620      |               |
| Reflection wavelength   | $\lambda_3$ | (nm) | 1260~1360                           | 1310/1490 | 1480~1500 |               |
| Insertion loss          | $\lambda_1$ | (dB) |                                     |           | 0.8       |               |
|                         | $\lambda_2$ |      |                                     |           | 0.7       |               |
|                         | $\lambda_3$ |      |                                     |           | 0.3       |               |
| Isolation               | $\lambda_1$ | (dB) | 60                                  |           |           |               |
|                         | $\lambda_2$ |      | 50                                  |           |           |               |
|                         | $\lambda_3$ |      | 25                                  |           |           |               |
| Directivity             |             | (dB) | 50                                  |           |           |               |
| Echo loss               |             | (dB) | 50                                  |           |           |               |
| Power handling          |             | (mW) |                                     |           | 500       |               |
| Operating temp.         |             | (°C) | -20                                 |           | +85       |               |
| Storage temp.           |             | (°C) | -40                                 |           | +85       |               |
| Fiber length            |             | (m)  | 0.5                                 |           |           |               |
| Fiber type              |             |      | SMF-28e with 900 $\mu$ m loose tube |           |           |               |
| Optical connector       |             |      | SC/APC, FC/APC                      |           |           | Other options |
| External dimension      |             | (mm) | 100×80×10                           |           |           |               |

## THE APPLICATION OF WD5943 IN FTTX PON NETWORK



## PRODUCT SERIES

| Model number | Transmission wavelength (λ1) | Transmission wavelength (λ2) | Reflection wavelength (λ3) | Exterior (mm) | Connector |
|--------------|------------------------------|------------------------------|----------------------------|---------------|-----------|
| WD5943-M2-SA | 1550nm<br>(1540~1565nm)      | 1590nm<br>(1580~1620nm)      | 1310/1490nm                | 100×80×10     | SC/APC    |
| WD5943-M2-FA |                              |                              | (1260~1380nm               |               | FC/APC    |
| WD5943-M2-LA |                              |                              | &1480~1500nm)              |               | LC/APC    |

## MODEL EXPLANATION

WD 5 9 43 - M2 - SA

| Product series |                  | Transmission wavelength (λ 1) |        | Transmission wavelength (λ 2) |        | Reflection wavelength (λ 3) |             | Dimension |             | Connector |        |
|----------------|------------------|-------------------------------|--------|-------------------------------|--------|-----------------------------|-------------|-----------|-------------|-----------|--------|
| WD             | Band multiplexer | 5                             | 1550nm | 9                             | 1590nm | 43                          | 1310/1490nm | M2        | 100×80×10mm | SA        | SC/APC |
|                |                  |                               |        |                               |        |                             |             |           |             | SP        | SC/UPC |
|                |                  |                               |        |                               |        |                             |             |           |             | FA        | FC/APC |
|                |                  |                               |        |                               |        |                             |             |           |             | FP        | FC/UPC |
|                |                  |                               |        |                               |        |                             |             |           |             | LA        | LC/APC |
|                |                  |                               |        |                               |        |                             |             |           |             | LP        | LC/UPC |