

## 1070/1020-1120nm High Power WDM Filter

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks



### SPECIFICATIONS

| Parameters                                      | Unit                            | Value   |   |
|---|---------------------------------|---|---|
| Pass Channel Wavelength Range $\lambda_1$       | nm                              | 1070 $\pm$ 1  |   |
| Reflective Channel Wavelength Range $\lambda_2$ | nm                              | 1020 $\pm$ 10, 1030 $\pm$ 10, 1040 $\pm$ 10, 1053 $\pm$ 10<br>1080 $\pm$ 5, 1092 $\pm$ 5, 1120 $\pm$ 5                                  |   |
| Insertion Loss                                  | Pass Channel@ $\lambda_1$       | dB  | $\leq$ 1.0  |
|   | Reflective Channel@ $\lambda_2$ | dB  | $\leq$ 0.8  |
| Configuration                                   | Y Type                          | -   | 3-port  |
|   | X Type                          | -   | 4-port (2x2 WDM)  |
| Isolation                                       | Pass Channel@ $\lambda_2$       | dB  | $\geq$ 25   |
|   | Reflective Channel@ $\lambda_1$ | dB  | $\geq$ 12   |
| Optical Return Loss                             | dB                              | $\geq$ 45   |   |
| Directivity                                     | dB                              | $\geq$ 50   |   |
| Polarization Dependent Loss                     | dB                              | $\leq$ 0.2  |   |
| Fiber Type                                      | -                               | HI1060 Fiber or 10/125um SC Fiber (E)<br>10/125um DC Fiber (O), 15/130um DC Fiber (W)<br>20/130um DC Fiber (Q) or 25/250um DC Fiber (R) |   |
| Fiber Tensile Load                              | N                               | 5   |   |
| Maximum Optical Power (CW)                      | W                               | 1, 2, 3, 5, 10, 15, 20  |   |
| Operating Temperature                           | °C                              | 0~50  |   |
| Storage Temperature                             | °C                              | -40~85  |   |
| Package Dimension                               | Stainless Steel Tube (SST)      | mm  | ( $\varnothing$ )5.5x35 ( $\leq$ 5W); ( $\varnothing$ )6.0x48 (5~10W) |
|   | Metal Box                       | mm  | (L)90x(W)18x(H)10 (>10W); (L)120x(W)12x(H)10 ( $\leq$ 10W)            |

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
  2. To add connectors, IL is 0.5dB higher, RL is 5dB lower.
  3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  4. Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

### ORDERING INFORMATION (PN)

| FFWM-          | NN              | NN               | -             | (C)           | -                      | HP            | NN           | -                       | (C) | (C) | C | NN | - | CC/CCC |
|----------------|-----------------|------------------|---------------|---------------|------------------------|---------------|--------------|-------------------------|-----|-----|---|----|---|--------|
| Ref Wavelength | Pass Wavelength | Configuration    | Optical Power | Package       | Fiber Type             | Fiber Sleeve  | Fiber Length | Connector Type          |     |     |   |    |   |        |
| 03= 1030nm     | 07= 1070nm      | X=X Type         | 1=1W          | M=Metal Box   | E=10/125 SC Fiber      | B= Bare Fiber | 05=0.5m      | N=Without Connector     |     |     |   |    |   |        |
| 05=1053nm      |                 | Blank for Y Type | 5=5W          | Blank for SST | Q=20/130 DC Fiber      | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |     |     |   |    |   |        |
| 09= 1092nm     |                 |                  | 10=10W        | or >10W       | R=25/250 DC Fiber      | 2=2mm Cable   | 15=1.5m      | LC/PC=LC/PC Connector   |     |     |   |    |   |        |
| 12=1120nm      |                 |                  | 20=20W        |               | Blank for HI1060 Fiber | 3=3mm Cable   | 20=2.0m      | SC/UPC=SC/UPC Connector |     |     |   |    |   |        |