

## 4C Multicore Fiber Single Fanouts

Multicore Fiber (MCF) fan-outs provide the ability to launch and retrieve signals to and from individual fiber cores.

### Applications:

- 2D bend sensing
- Active Optical Cables (AOCs)
- Photonic Integrated Circuits
- Distributed sensing
- Next-generation optical amplifiers
- Downhole sensing in oil exploration applications
- Pipeline monitoring

### Specifications:

| Parameter                     | FAN-4C                                                                  |
|-------------------------------|-------------------------------------------------------------------------|
| MCF Fiber Type                | YOFC MCF-4-42/125/250(SM)                                               |
| Operating Wavelength          | 1310/1550nm                                                             |
| Cut-Off Wavelength            | < 1300nm                                                                |
| Mode Field Diameter           | $8.9 \pm 0.5 @ 1310\text{nm} / 9.8 \pm 0.5 @ 1550\text{nm}$             |
| Core-to-Core Spacing          | $41.5 \mu\text{m}$                                                      |
| Single Fanouts Insertion Loss | $\leq 0.6\text{dB}$                                                     |
| Crosstalk (dB)                | $> 55\text{dB}$                                                         |
| Return Loss                   | $> 55\text{dB}$                                                         |
| Core Configuration            | Square                                                                  |
| Single Mode Fiber Type        | Corning LBL(G657A2) fiber                                               |
| MCF Fiber Length              | $1 \pm 0.05\text{m}$                                                    |
| SMF Fiber Length              | $1 \pm 0.05\text{m}$                                                    |
| Pigtail type                  | 0.9mm loose tube ,MCF:Black,SMF:White                                   |
| Package Dimensions            | $\phi 3 \times 28\text{mm}$ ( $\phi 2.5 \times 18\text{mm}$ Bare Fiber) |
| Operating Temperature (°C)    | 0-75°C                                                                  |
| Connectorization              | SMF: FC/APC (narrow keyway)<br>MCF: None                                |

### 4C MCF Single Fanouts-FC/APC

