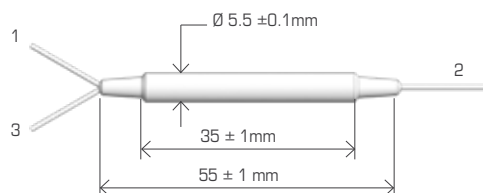
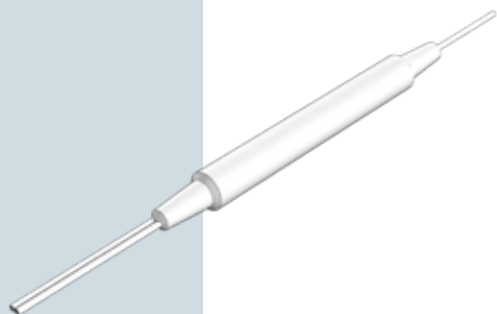




## PM MINI OPTICAL CIRCULATOR



The Mini Fiber Optic Circulator is a compact, high performance light-wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. The component provides high isolation, low insertion loss, low PDL, low PMD and excellent environmental stability. It is widely used in combination with fiber gratings

and other reflective components in DWDM systems, high speed systems and bi-direction communication systems.

|                       | PARAMETERS                              | VALUE                |                    | UNIT |
|-----------------------|---|----------------------|--------------------|------|
|                       |   | TYPE A               | TYPE B             |      |
| <b>SPECIFICATIONS</b> | Center Wavelength ( $\lambda_c$ )       | 1310 or 1550 or 1064 |                    | nm   |
|                       | Operating Wavelength Range              | $\lambda_c \pm 30$   | $\lambda_c \pm 20$ | nm   |
|                       | Typ. Insertion Loss, $\lambda_c$ , 23°C | 0.7                  | 0.6                | dB   |
|                       | Max Insertion Loss                      | 0.9                  | 0.8                | dB   |
|                       | Peak Isolation                          | 52                   | 40                 | dB   |
|                       | Typ. Isolation, $\lambda_c$ , 23°C      | 46                   | 30                 | dB   |
|                       | Min. Isolation, 23°C                    | 40                   | 20                 | dB   |
|                       | Min. Extinction Ratio                   | 22                   | 20                 | dB   |
|                       | Crosstalk                               | 50 (Min.)            |                    | dB   |
|                       | Return loss                             | 50 (Min.)            |                    | dB   |
|                       | Max. Optical Power (Continuous Wave)    | 300                  |                    | mW   |
|                       | Max. Tensile Load                       | 5                    |                    | N    |
|                       | Operating Temperature Range             | -5 to +70            |                    | °C   |
|                       | Storage Temperature Range               | -40 to +85           |                    | °C   |

\*Note: IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

| CODE            | TYPE |        | N° OF PORTS |         | WAVELENGTH |         | FIBER TYPE |                         | CONNECTOR TYPE |        | FIBER LENGTH |         |
|-----------------|------|--------|-------------|---------|------------|---------|------------|-------------------------|----------------|--------|--------------|---------|
|                 | A    | Type A | 13          | 3 ports | 31         | 1310nm  | 25         | 250 $\mu$ m Panda Fiber | 0              | None   | 05           | 0.5 m   |
| <b>F4M-CIRP</b> | B    | Type B | 14          | 4 ports | 55         | 1550nm  | 9L         | 900 $\mu$ m Loose Tube  | A              | SC/UPC | 10           | 1m      |
|                 |      |        |             |         | 64         | 1064nm  | S          | Specify                 | B              | SC/APC | S            | Specify |
|                 |      |        |             |         | S          | Specify |            |                         | C              | FC/UPC |              |         |
|                 |      |        |             |         |            |         |            |                         | D              | FC/APC |              |         |
|                 |      |        |             |         |            |         |            |                         | E              | LC/UPC |              |         |
|                 |      |        |             |         |            |         |            |                         | Q              | LC/APC |              |         |
|                 |      |        |             |         |            |         |            | S                       | Specify        |        |              |         |

ORDER CODE EXAMPLE

**F4M-CIRP - A - 13 - 55 - S - S - S**

