## Faraday Mirror



ACP's FRDMR Series is a fiber optic polarization rotation mirror designed for fiber optic networks and measurement applications. the device can help to eliminate polarization sensitivity of an optical fiber system. Applications include eliminating antenna remoting systems. FRDMR Series Faraday Mirror is optical path epoxy free and thus offers low insertion loss and high temperature stability. All AC Photonics' products are Telcordia qualification tested.

## PERFORMANCE SPECIFICATIONS

| Parameter | Specifications |
| :---: | :---: |
| Center Wavelength | 1310nm, 1480nm, or 1550nm |
| Minimum Bandwidth | 30 nm |
| Typical Insertion Loss | $\leq 0.4 \mathrm{~dB}$ |
| Maximum Insertion Loss | $\leq 0.6 \mathrm{~dB}$ |
| Maximum Polarization Dependent Loss | $\leq 0.1 \mathrm{~dB}$ |
| Maximum Polarization Mode Dispersion | $\leq 0.05 \mathrm{ps}$ |
| Faraday Rotation Angle at Center Wavelength (Single Pass) | $45^{\circ}$ |
| Rotation Angle Tolerance at Center Wavelength | $0.5^{\circ}$ |
| Optical Power | 300 mW |
| Maximum Tensile Load | 5 N |
| Operating Temperature | -5 to $+75^{\circ} \mathrm{C}$ |
| Storage Temperature | -40 to $+85^{\circ} \mathrm{C}$ |
| Package Dimensions | $\varnothing 5.5 \mathrm{mmxL} 35 \mathrm{~mm}$ or $\varnothing 4.5 \mathrm{~mm} \times \mathrm{L} 20 \mathrm{~mm}$ or $\varnothing 3.0 \mathrm{~mm} \times \mathrm{L} 20 \mathrm{~mm}$ or $\varnothing 2.5 \mathrm{~mm} \times \mathrm{L} 14 \mathrm{~mm}$ |

## FEATURES

High Isolation
Low Insertion Loss
High Return loss
Low Polarization Sensitivity
Epoxy Free Optical Path

## APPLICATION

Fiber Optical Amplifier CATV Fiberoptic Links Fiberoptic Systems Testing Fiberoptic LAN Systems Teleccommunications

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## MECHANICAL DIMENSIONS

Standard Package Dimensions:


Mini (N) Package Dimensions:


Mini (M) Package Dimensions:


Mini (U) Package Dimensions:


## ORDERING INFORMATION

| FRDMR |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wavelength | Pigtail Style | Fiber Length | In/Out Connector | Dimensions |
|  | $\begin{aligned} & 13=1310 \mathrm{~nm} \\ & 14=1480 \mathrm{~nm} \\ & 15=1550 \mathrm{~nm} \end{aligned}$ | $\begin{aligned} & 1=\text { Bare Fiber } \\ & 2=900 \text { um Jacket } \end{aligned}$ | $\begin{aligned} & 1=1.0 \mathrm{~m} \\ & 2=2.0 \mathrm{~m} \\ & \mathrm{~S}=\text { Specify } \end{aligned}$ | $\begin{aligned} & 0=\text { None } \\ & 1=\text { FC/APC } \\ & 2=\text { FC/PC } \\ & 3=\text { SC/APC } \\ & 4=\text { SC/PC } \\ & 5=\text { ST } \\ & 6=\text { LC/UPC } \\ & 7=\text { LC/APC } \end{aligned}$ | $\mathrm{M}=\varnothing 4.5 \mathrm{mmxL} 20 \mathrm{~mm}$ <br> $\mathrm{N}=\varnothing 3.0 \mathrm{mmxL} 20 \mathrm{~mm}$ <br> $\mathrm{U}=\varnothing 2.5 \mathrm{mmxL} 14 \mathrm{~mm}$ <br> Leave Empty = <br> $\varnothing 5.5 \mathrm{mmxL} 35 \mathrm{~mm}$ |

