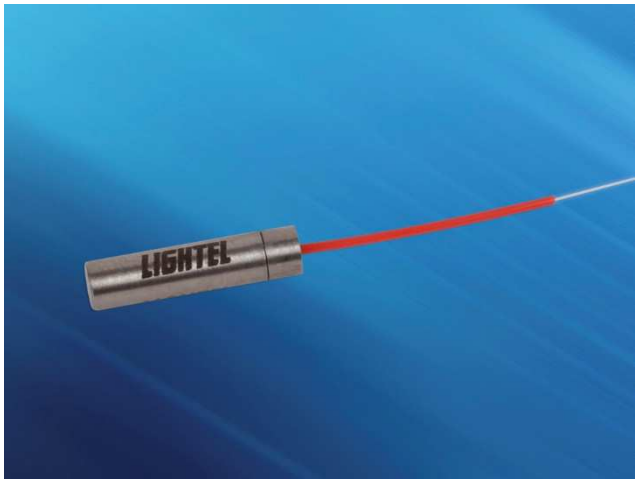
LIGHTEL
True Color Components

Broadband FRM
1550 nm, SM & PM

Faraday Rotator Mirrors (FRMs) are used in a number of fiber optic applications, including interferometric sensor systems. In general, FRM performance parameters are specified over a central wavelength and narrow temperature range. This means that the rotation angle will change over wavelength and temperature.

Lightel now offers a compact form factor, broadband FRM (BBFRM) that rotates the light 45 degrees (single pass) over a wavelength range of 1550nm ±30nm, and a temperature range of -20°C to +70°C. With a constant rotation angle within this bandwidth and operating temperature range, the broadband FRM can reduce noise dramatically for interferometric sensor systems.



Specifications

Parameter	Specification
Center Wavelength	1550 nm
Bandwidth	± 30 nm
Insertion Loss	≤ 1.0 dB
Faraday Rotation Angle (single pass, within the bandwidth & operating temperature range)	45 ± 0.5°
Extinction Ratio (PM)	≥ 20 dB
PDL (SM)	≤ 0.05 dB
Maximum Power	300 mW
Operating Temperature	-20° C ~ + 70° C
Storage Temperature	- 40° C ~ + 85° C
Package Dimensions	5.0 mm (Φ) x 20 mm (L)

Note 1: All values specified are without connectors.
Note 2: SM fiber type: SMF-28e or compatible fiber.
Note 3: PM fiber type: PM 1550 Panda fiber.
Note 4: Other wavelengths available upon request.

Ordering Information

B F R M – ___ – **1 5 5 0** – **A** – ___ – ___

Fiber Type
SM: SM fiber
PM: PM fiber

Center Wavelength
15: 1550 nm

Fiber Length
A: 1 meter

Pigtail Style
(=Package style)
B: bare fiber
L: 900 μm loose tube

Connector
0: None
1: FC/PC
2: FC/APC
3: SC/ PC
4: SC/APC
5: FC/SPC
6: SC/SPC
7: LC/UPC
8: LC/SPC
9: Special
A: FC/UPC
B: SC/UPC
C: ST

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