1.5um High Power Chirped FBG for Fiber Laser

Description

GKER high-quality 1.5um fiber grating reflectors (also called Fiber Laser cavity mirrors) are written in specialty double clad optical fiber with optimized chirped Fiber Bragg Grating (FBG) writing technology. They are specially designed for 1.5um high power continuous and pulsed fiber lasers, suitable for single-mode fiber to the large mode field (LMA) fiber, the pump power handling capacity can reach more than 50W. GKER can provide various bandwidths and accurately matched high and low reflectivity gratings for different applications.

Key Features

- Extremely Low Temperature Slope
- High Conversion Efficiency
- High Power Handling
- Outstanding Reliability
- Wide Variety of Fiber Types

Applications

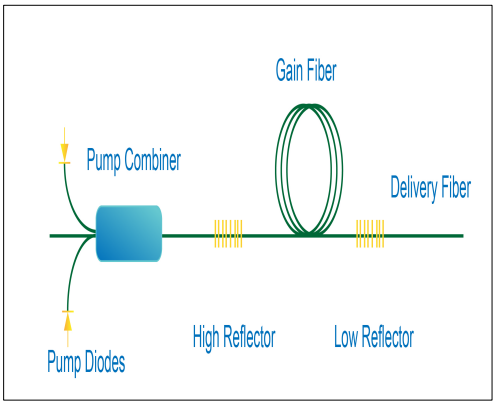
High Power Fiber Laser	Pulsed Fiber Laser

Specifications

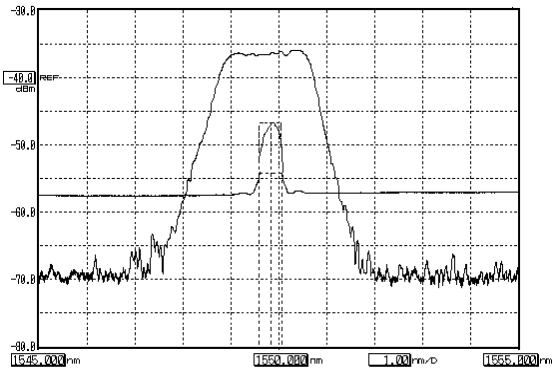
Parameter	Unit	Specification
Typical Central Wavelength[1]	nm	1550, 1560
Tolerance on Central Wavelength	nm	1
Type of Reflector		HR LR
Peak Reflectivity[2]	%	>99.5 10±2
FWHM2 (3dB)	nm	0.5~3 0.1~1
Side Mode Suppression Ratio	dB	20 10
Wavelength Mismatch (LR to HR)	nm	0.2
Fiber type[3]		SM-1550-GDF
Power Handling of Pump	W	50
Input/output Fiber Length	m	1
Package Type		Recoated Only

1. Other central wavelength available on request.
2. Other bandwidth and reflectivity available on request.
3. Other fiber types available on request.

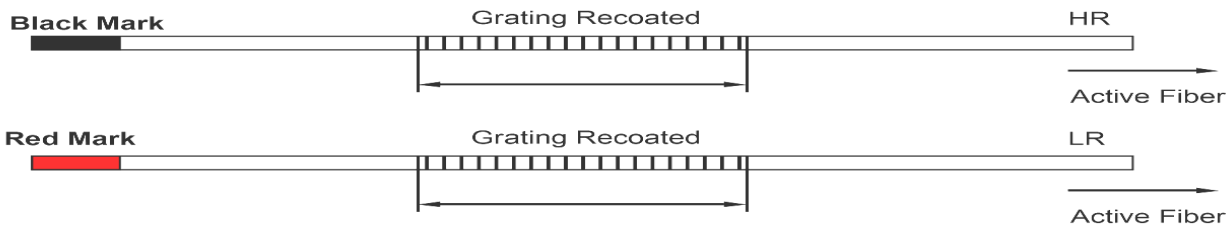
High Power Fiber Laser Configuration



Matched HR/LR Spectrum



Package Dimensions



Ordering Information

GK-FBG-ER-①-②-③-④-⑤-⑥

①: Package

M: Metal Housing

R: Recoated

②: Grating Type

H: High Reflector

L: Low Reflector

③: Central Wavelength in nm

550: 1550nm

④: Fiber Type

0912: 9/125um, SM-1550-GD

(NA=0.12/0.46)

⑤: Bandwidth in nm

02: 2nm

⑥: Reflectivity in %

99: 99%

10: 10%