



## 1.0um High Power Chirped FBG for Fiber Laser

### ● Description

GKER high-quality 1.0um 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 1.0um 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 3000W.

GKER can provide various bandwidths and accurately matched high and low reflectivity gratings for different applications. They are offered in heat dissipative package or recoated only.

### ● 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
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### ● Specifications

Parameter	Unit	Specification
Typical Central Wavelength <sup>1</sup>	nm	1018, 1050, 1064, 1070, 1080, 1090
Tolerance on Central Wavelength	nm	1
Type of Reflector		HR      LR
Peak Reflectivity <sup>2</sup>	%	>99.5    10±2
FWHM <sup>2</sup> (-3dB)	nm	2~3±0.3    1±0.1
Side Mode Suppression Ratio	dB	20          10
Wavelength Mismatch (LR to HR)	nm	0.2
Input/output Fiber Length	m	1
Package Type		Recoated or High Power Metal Housing

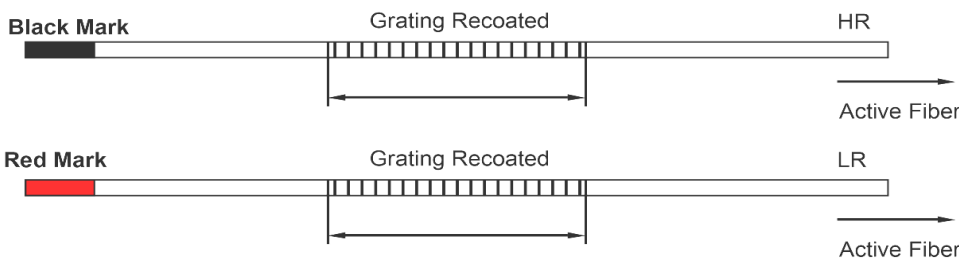
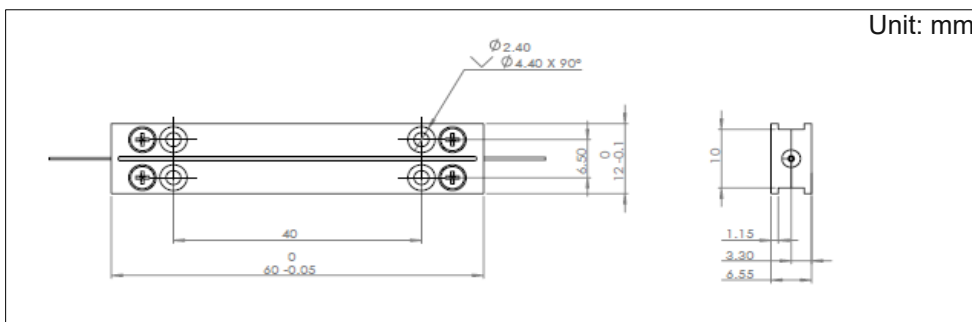
1. Other central wavelength available on request.
2. Other bandwidth and reflectivity available on request.

## Fiber Types

Fiber Core/ Cladding Diameter(um)	Power Handling of Pump and Signal (W)					Package	
	500/300	500/800	2000/1500	3000/2000	4000/3000	Recoated Only	Heat Dissipati Package
10/125	√					√	√
15/130	√					√	√
20/130	√					√	√
30/250		√				√	√
14/250			√			√	√
20/400				√	√	√	√
22/400				√	√	√	√
25/400					√	√	√

Notes: Other fiber types available on request.

## Package Dimensions



## Ordering Information

GK-FBG-TM-①-②-③-④-⑤-⑥-⑦

### ①: Package

M: Metal Housing  
R: Recoated

### ②: Grating Type

H: High Reflector  
L: Low Reflector

### ③: Central Wavelength in nm

070: 1070nm

### ④: Fiber Type

1012: 10/125um NA=0.08/0.46  
2040: 20/400um NA=0.065/0.46  
2540: 25/400um NA=0.065/0.46

### ⑤: Bandwidth in nm

02: 2nm

### ⑥: Reflectivity in %

99: 99%  
10: 10%

### ⑦: Handling Power of Signal

02: 2000W  
03: 3000W