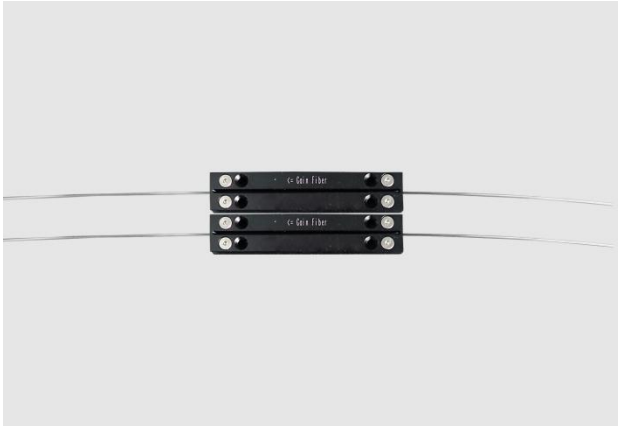
# FBG1000 High Power Fiber Bragg Grating

## PRODUCT DESCRIPTION

CINA Laser FBG1000 High power double-clad fiber grating pair, with chirped phase mask writing technology, through a set of high reflection (HR) and low reflection (LR) grating pairs to form a stable laser resonator, and output high power through OC coupler, low noise, low distortion laser. It can meet the specific needs of high power and high reliability of various fiber lasers.



## PRODUCT FEATURE

- ▶ High efficiency, high reliability
- ▶ Extremely low temperature rise for high power applications
- ▶ Excellent reflection and transmission spectral characteristics, which can increase the SBS threshold

## MAIN APPLICATION

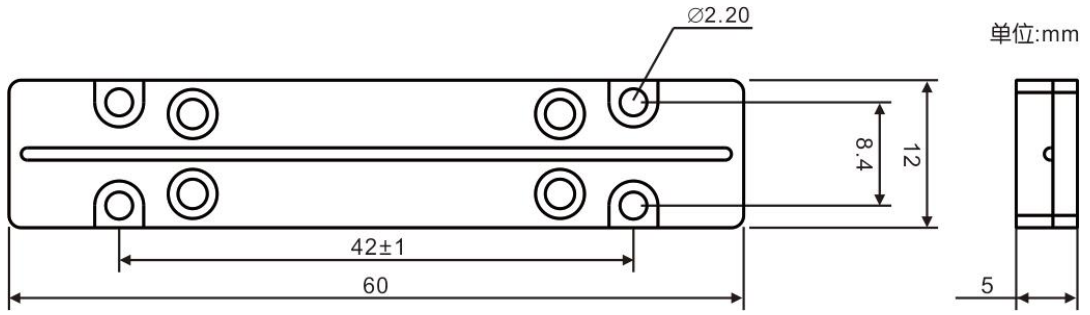
- ▶ High power continuous fiber laser
- ▶ Pulsed fiber laser

## TECHNIQUE INDEX

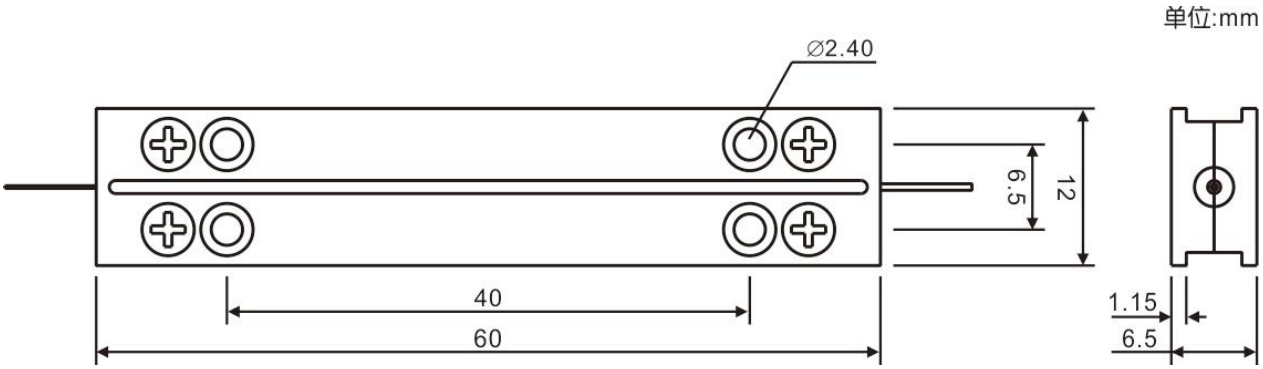
| Performance | | | Index | | | Supplement |
|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | |
| Optic Feature | Central wavelength | (nm) | 1079.8 | 1080.0 | 1080.2 | FBG1080 |
| | | | 1069.8 | 1070.0 | 1070.2 | FBG1070 |
| | | | 1089.8 | 1090.0 | 1090.2 | FBG1090 |
| | | | 1063.8 | 1064.0 | 1064.2 | FBG1064 |
| | Bandwidth (-3dB) | (nm) | 0.9 | 1.0 | 1.1 | FBG1000-1 |
| | | | 2.7 | 3.0 | 3.3 | FBG1000-3 |
| | Reflectivity | (%) | | 99.5 | | HR |
| | | | 8 | 10 | 12 | OC |
| | Wavelength matching | (nm) | | | 0.2 | |
| | Temperature sensitivity | (pm/℃) | | | 20 | |
| | Thermal Slope | (℃/w) | | | 0.02 | |
| | Signal power handling | (W) | | 1000 | | 1.0Kw |
| | | | | 1500 | | 1.5Kw |
| | | | | 2000 | | 2.0Kw |
| | | | | 3000 | | 3.0Kw |
| | Pump power handling | (W) | | 1500 | | 1.0Kw |
| | | | | 2300 | | 1.5Kw |
| | | | | 3000 | | 2.0Kw |
| | | | | 4000 | | 3.0Kw |
| | Fiber type | | GDF-14/250, NA=-0.07/0.46 | | | 142 |
| | | | GDF-20/400, NA=-0.65/0.46 | | | 204 |
| | | | GDF-22/400, NA=-0.65/0.46 | | | 224 |
| | | | GDF-25/400, NA=-0.65/0.46 | | | 254 |
| General Feature | Fiber length | (m) | 1.2 | | | |
| | Storage temperature | (℃) | -40 | | +85 | |
| | Size(L)x(W)x(H) | (mm) | 60 ×12 ×5 | | | A type |
| | | | 60 ×12 ×6.5 | | | B type |

## Size

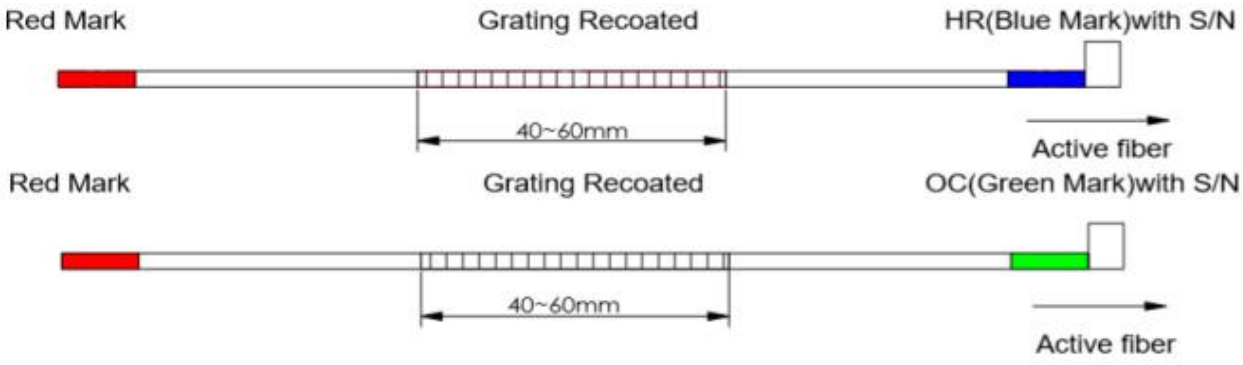
A type



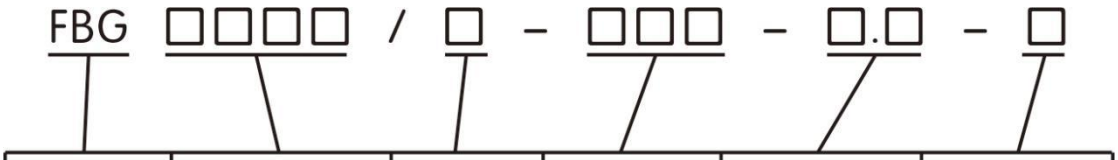

B type




N type



## ORDER INFORMATION




| Product name | Central wavelength | | FWHM | | Fiber type | | Power handing | | Package | |
|---|---|---|---|---|---|---|---|---|---|---|
| Fiber Bragg Grating | 1080 | 1080nm | 1 | 1mm | 142 | 14/250 | 1.0 | 1.0 Kw | A | A type |
| | 1070 | 1070nm | 3 | 3mm | 204 | 20/400 | 1.5 | 1.5 Kw | B | B type |
| | 1090 | 1090nm | | | 224 | 22/400 | 2.0 | 2.0 Kw | N | Without |
| | 1064 | 1064nm | | | 254 | 25/400 | 3.0 | 3.0 Kw | | |