

Fibre Bragg Grating for Fibre Laser

FBG(Fibre Bragg Grating) is a periodic refractive index modulation in optical fibre core through UV exposure which can achieve the modulation of signal light in optical fibre. It is an indispensable part of a high power fibre laser.

Characteristics

- Low temperature slope is less than 0.01°C /W under 915 nm pump power
- Central wavelength 1064nm or 1080nm
- Bandwidth operational 0.1nm~3.2nm
- Wavelength mismatch within 0.2nm
- Fibre type can be customized

Applications

- High power fibre laser



Specifications-1

10/130 FBG

Product Type	FBG-1064-995-25-J0505-H	FBG-1064-100-10-J0505-O
FBG Attribute	HR	OC
Center Wavelength (nm)	1064±1	
Peak Reflectivity (%)	≥ 99.5	10 ± 2
Bandwidth (FWHM) (nm)	2.0 - 3.0	0.6 - 1.0
Wavelength Match (nm)	< 0.2	
Side Mode Suppression Ratio (dB)	> 10	
Fiber Type	YOFC GDF-10/130 or Customized	
Signal Power Handling (W)	100	
Package Type	Recoated Only	
FBG Pigtail Length	Each side 0.5m or Customized	

Specifications-2

14/250 FBG

Product Type	FBG 1080-995-30-R1212-H	FBG 1080-010-10-R1212-O
FBG Attribute	HR	OC
Center Wavelength (nm)	1079 - 1081	1079 - 1081
Peak Reflectivity (%)	≥ 99.5	10 ± 2
Bandwidth (FWHM) (nm)	3 ± 0.3	1 ± 0.2
Wavelength Match (nm)	< 0.2	
Side Mode Suppression Ratio (dB)	> 10	
Fiber Type	YOFC GDF-14/250 or Customized	
Signal Power Handling (W)	1000	
Package Type	Heat Dissipation Package / Recoated Only	
FBG Pigtail Length	Each side 1.2m	

Specifications-3

20/400 FBG

Product Type	FBG 1080-995-30-H1212-H	FBG 1080-010-10-H1212-O
FBG Attribute	HR	OC
Center Wavelength (nm)	1079 - 1081	1079 - 1081
Peak Reflectivity (%)	≥ 99.5	10 ± 2
Bandwidth (FWHM) (nm)	3 ± 0.3	1 ± 0.2
Wavelength Match (nm)	< 0.2	
Side Mode Suppression Ratio (dB)	> 10	
Fiber Type	YOFC GDF-20/400 or Customized	
Signal Power Handling (W)	1500	
Package Type	YOFC Heat Dissipation Package / Recoated Only	
FBG Pigtail Length	Each side 1.2m	

Specifications-4

25/400 FBG

Product Type	FBG 1080-995-30-S1212-H	FBG 1080-010-10-S1212-O
FBG Attribute	HR	OC
Center Wavelength (nm)	1079 - 1081	1079 - 1081
Peak Reflectivity (%)	≥ 99.5	10 ± 2
Bandwidth (FWHM) (nm)	3 ± 0.3	1 ± 0.2
Wavelength Match (nm)	< 0.2	
Side Mode Suppression Ratio (dB)	> 10	
Fiber Type	YOFC GDF-25/400 or Customized	
Signal Power Handling (W)	2000	
Package Type	YOFC Heat Dissipation Package	
FBG Pigtail Length	Each side 1.2m	

Dimensions of Heat Dissipation Package

