



kW Package Free Clearcut™ Fiber Bragg Grating (PFCG Series)

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The kW Package Free Clearcut™ Fiber Bragg Grating products are ultra low insertion loss fiber bragg gratings for high power fiber lasers. With AFR's Clearcut designing and special process, the devices can handle more than 2.0 kW pump power and 1.5 kW signal power with recoated only.

Key Features

- High Power Handling
- Package Free Designing/Ultra Low Temperature Slope
- Flexible and Good Mechanical Performance
- Outstanding Reliability

Applications

- Continuous Wave Fiber Laser
- High Power Fiber Laser

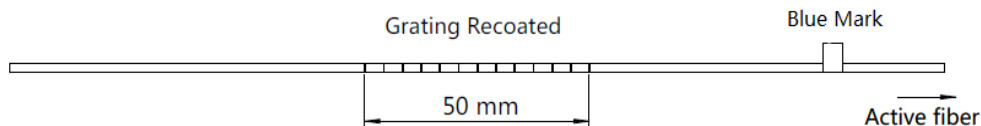
Specifications

Parameter	Unit	Value	
Center Wavelength	nm	1080 ± 1	
Max. Wavelength Mismatch (OC Relative HR)	nm	0.2	
Min. Core Signal Power Handling ¹	W	1500	
Min. Clad Pump Power Handling	W	2000	
Temperature Slope Suspended in Air ²	°C/W	≤0.015	
High Reflector (HR) / Output Coupler (OC)		HR	OC
Peak Reflectivity	%	≥99.0	5 - 15
Reflection Bandwidth (FWHM)	nm	2 - 3	1.0
Tolerance on Reflection Bandwidth	nm	0.2 - 0.3	0.1
Min. Side Mode Suppression Ratio	dB	20	10
Fiber Type		LMA-GDF-20/400-M, 0.065/0.46 NA	
Package Dimensions	mm	Recoated	
Min. Banding Radius	mm	75.0	
Storage Temperature	°C	-40 to +85	

1. The grating area should be kept on active cooling plates. (The cooling temperature ≤25 °C)

2. For total power: the signal power in the core and the pump power in the cladding. (The slope efficiency is about 70 %)

Package Dimensions



Ordering Information

PFCG-P2000-①①①①-②②-③

①①①①: Center Wavelength

1080 - 1080 nm

SSSS - Specify

②②: Reflectivity Bandwidth

02 - 2 nm

03 - 3 nm

SS - Specify

③: Pigtails Length (on Each Side)

Q - 0.75 m

1 - 1 m

S - Specify

*Clearcut is a product trade mark of AFR representing an unique technology used in its FBG products.

