



High Power ClearCut Fiber Bragg Grating (HPCG Series)

Rev 11F

Description

The High Power ClearCut Fiber Bragg Grating products are low insertion loss fiber bragg gratings for high power fiber lasers. With AFR's ClearCut design and packaging, the FBG can handle kilowatt level pump power and signal power. Custom configurations are available.

Key Features

- High Power Handling
- Low Temperature Slope
- Exceptional Reliability

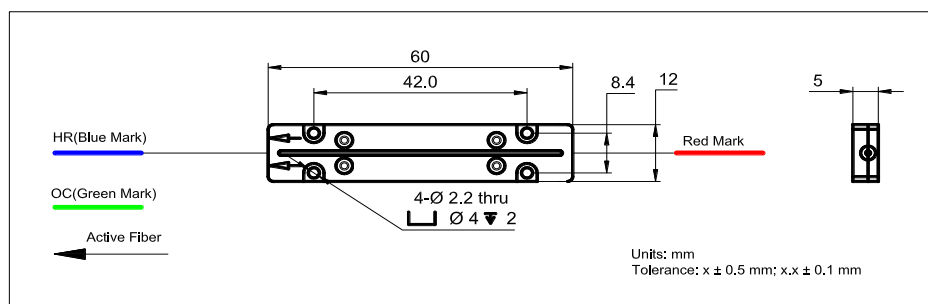
Applications

- Fiber Laser

Specifications

Parameter	Unit	Value			
Center Wavelength	nm	1018, 1030, 1064, 1070, 1080, 1090			
Tolerance on Center Wavelength	nm	± 1.0			
Max. Wavelength Mismatch (OC Relative HR)	nm	0.2			
High Reflector (HR)/Output Coupler (OC)		HR		OC	
Peak Reflectivity	%	≥ 99.0		(5.0 - 30.0) ± 2.0	
Reflection Bandwidth at 95%	nm	1.5 - 4.0		/	
Reflection Bandwidth at 50%	nm	/		0.2 - 2.0	
Tolerance on Reflection Bandwidth	nm	0.1 - 0.4		0.1 - 0.2	
Min. Side Mode Suppression Ratio	dB	20		10	
Fiber Core/Cladding Dimension	μm	10/125	14/250	20/400	25/400
Max. Core Signal Power Handling	W	300	1000	3000	
Max. Clad Pump Power Handling	W	450	1500	3000	
Fiber Type	-	PM or Non-PM			
Package Dimensions	mm	60 (L) × 12 (W) × 5 (H)			
Cooling Bottom Plate Temperature	°C	≤ 25			
Storage Temperature	°C	- 40 to + 85			

Package Dimensions



Ordering Information

HPCG-①①①①.①-②.②/②.②-③③-④④/④④④-⑤-P⑥⑥⑥⑥-⑦

①①①①.①: Center Wavelength

XXXX.X - XXXX.X nm

SSSS.S - Specify

②.②/②.②: Reflectivity Bandwidth HR/OC

X.X/X.X - X.X nm HR/X.X nm OC

S.S/S.S - Specify

③③: Peak Reflectivity Of OC

XX - XX%

SS - Specify

④④/④④④: Fiber Core/Cladding Dimension

XX/XXX - XX μ m/XXX μ m

SS/SSS - Specify

⑤: Fiber Type

N - Non-PM

P - PM

⑥⑥⑥⑥: Pump Power Handling

XXXX - XXXX W

SSSS - Specify

⑦: Pigtails Length (Each Side)

A - 1 m

B - 1.2 m

C - 1.4 m

S - Specify (≤ 1.7 m)

¹ClearCut is a product trade mark of AFR representing an unique technology used in its FBG products.