



ClearCut™ High Power Fiber Bragg Grating (HPCG Series)

Rev 11F

Descriptions

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

Key Features

- High Power Handling
- ClearCut Grating Designing
- Outstanding Reliability
- Available for Customizing

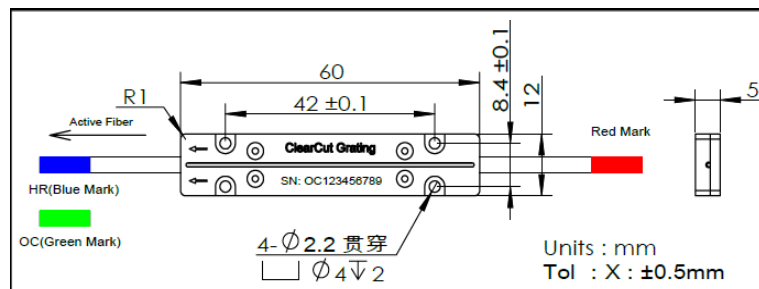
Applications

- Continuous Wave Fiber Laser
- High Power Fiber Laser
- Pulsed Fiber Laser

Specifications

Parameter	Unit	Value			
Center Wavelength	nm	1018, 1030, 1064, 1070, 1080			
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	3000
Max. Clad Pump Power Handling	W	450	1500	3000	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 ②.②/②.②: Reflectivity Bandwidth HR/OC ③③: Peak Reflectivity of OC
 XXXX.X - XXXX.X nm X.X/X.X - X.X nm HR/X.X nm OC XX - XX%
 SSSS.S - Specify S.S/S.S - Specify SS - Specify

④④/④④④: Fiber Core/Cladding Dimension ⑤: Fiber Type ⑥⑥⑥⑥: Pump Power Handling ⑦: Pigtails Length (Each Side)
 XX/XXX - XX μm/XXX μm N - Non-PM XXXX - XXXX W A - 1 m B - 1.2 m C - 1.4 m
 SS/SSS - Specify P - PM SSSS - Specify S - Specify (≤ 1.7 m)

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