



DIRECTED ENERGY



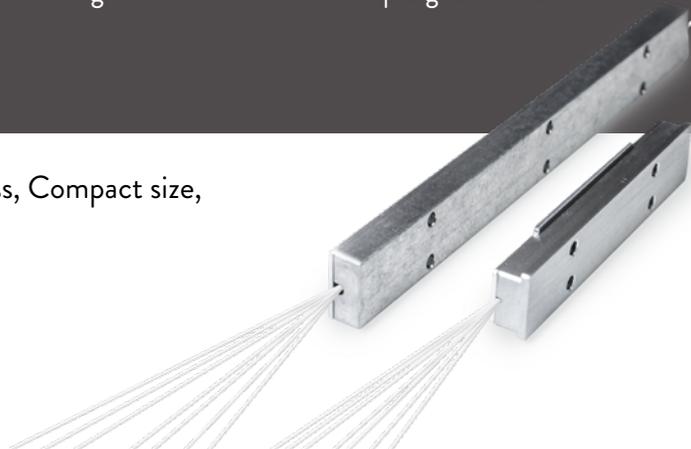
OPTICAL FIBER AND COMPONENT SOLUTIONS FOR DIRECTED ENERGY

High Power CoolMode™ Pump Combiners and High Power CoolMode Pump Signal Combiners

High pump transmission, Low signal loss, Compact size,
Reduced cooling requirements

OFS | WWW.OFSOPTICS.COM

55 Darling Drive, Avon, CT 06001



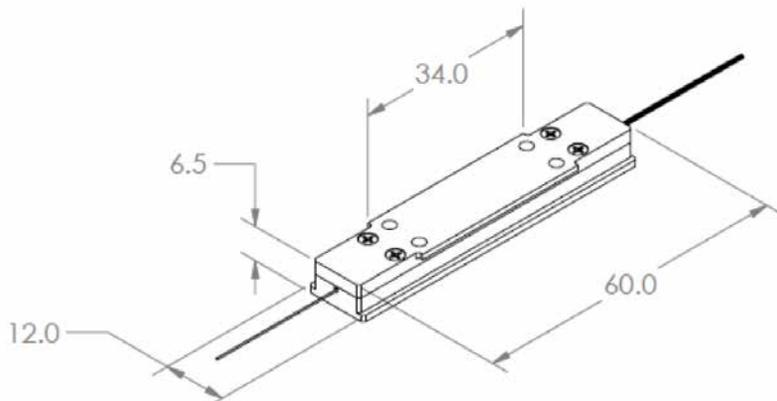


7:1 High Power CoolMode Pump Combiner Specification

Description		7:1 High Power CoolMode Pump Combiner Multimode Fiber			
Feature	Min.	Typical	Max.	Unit	NOTE
Multimode Input Fibers					
Number		7			
Numerical Aperture (NA)		0.22			
Coating Outer Diameter	240	245	250	µm	
Clad Diameter		125		µm	
Core Diameter		110		µm	
Pigtail Fiber Length	1			m	
Coating	High Index Acrylate				
Output Fiber					
Core NA		0.22			
Coating Diameter		425		µm	
Clad Diameter	244	246	248	µm	
Core Diameter	229	231	233	µm	
Pigtail Fiber Length	1			m	
Coating	Low Index Acrylate				
Optical Performance					
Multimode Transmission	95	98	99	%	OFS Standard Test Condition: 95% power within 0.15 NA
Overall Backward Cross Talk		TBD			
Average Isolation (per leg)		TBD			
Pump Power Peg Leg		71W			
Total Pump Power		400W			
Environmental	Transport and Storage Temperature			-40 to +85 °C	
	Transport and Storage Humidity			< 85% (non-condensing)	
Mechanical Package	60 x 12 x 6.5 mm			See Drawing	
Package Weight	12g				
Order by Part Number	7000626B				

Applications: Directed Energy

NOTE: Custom configurations and packages are available upon request.



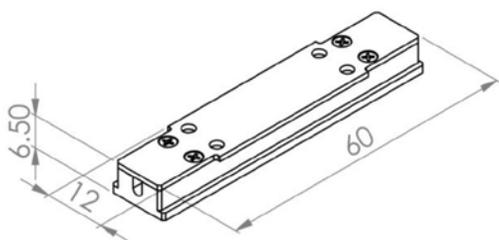
Mechanical Dimensions (all units in mm)
For both 7000626 and 7000665

6+1:1 High Power CoolMode Pump Signal Combiner Specification

Description						6+1:1 High Power CoolMode Pump Signal Combiner - 400 μm Output	
Feature	Min.	Typical	Max.	Unit	NOTE		
Multimode Pump Input Fibers							
Number		6					
Numerical Aperture (NA)		0.22					
Coating Outer Diameter	375	400	425	μm			
Clad Diameter	244	246	248	μm			
Core Diameter	229	231	233	μm			
Pigtail Fiber Length	1	2		m			
Coating	Low Index Acrylate						
Signal Input Fiber						Double Clad	
Core MFD @ 1064 nm		11		μm			
Coating Outer Diameter	240	245	250	μm			
Clad Diameter		125		μm			
Pigtail Fiber Length	2	3		m			
Coating	Low Index Acrylate						
Output Fiber							
Core NA	0.060	0.065	0.070				
Cladding NA		0.46					
Core MFD @ 1064 nm	16.6	18	19.3	μm			
Coating Outer Diameter	555	560	565	μm			
Clad Diameter	390	395	400	μm			
Pigtail Fiber Length	5	6.5		m			
Coating	Low Index Polymer						
Optical Performance							
Multimode Transmission	95	98		%	OFS Standard Test Condition: 95% power within 0.15 NA		
Signal Transmission @ 1064 nm	89	90		%	Fundamental mode transmission		
Pump Power Peg Leg		500 W					
Total Pump Power		2400 W					
Environmental	Transport and Storage Temperature Transport and Storage Humidity				-40 to +85 $^{\circ}\text{C}$ < 85% (non-condensing)		
Mechanical Package	60 x 12 x 6.5 mm				See Drawing		
Package Weight	21g						
Order by Part Number		7000665B-05					

Applications: Directed Energy

NOTE: Custom configurations and packages are available upon request.



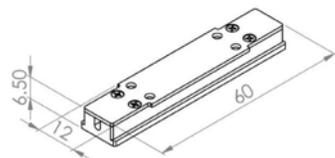
Mechanical Dimensions (all units in mm)

7+1:1 High Power CoolMode Pump Signal Combiner Specification

Description					7+1:1 High Power CoolMode Pump Signal Combiner - 400 μm Output	
Feature	Min.	Typical	Max.	Unit	NOTE	
Multimode Pump Input Fibers						
Number		7				
Numerical Aperture (NA)		0.22				
Coating Outer Diameter	375	400	425	μm		
Clad Diameter	244	246	248	μm		
Core Diameter	229	231	233	μm		
Pigtail Fiber Length	1	2		m		
Coating	Low Index Acrylate					
Signal Input Fiber					Double Clad	
Core MFD @ 1064 nm		11		μm		
Coating Outer Diameter	235	245	255	μm		
Clad Diameter	124	125	126	μm		
Pigtail Fiber Length	1	2		m		
Coating	Low Index Acrylate					
Output Fiber						
Core NA		0.065				
Cladding NA		0.46				
Core Diameter		20		μm		
Coating Outer Diameter	555	560	565	μm		
Clad Diameter	395	400	405	μm		
Pigtail Fiber Length	1	2.5		m		
Coating	Low Index Polymer					
Optical Performance						
Multimode Transmission	96	97	98	%	OFS Standard Test Condition: 95% power within 0.15 NA Target is >95%, will update after initial attempts	
Signal Transmission @ 1064 nm	85	90	91	%	Fundamental mode transmission	
Pump Power Peg Leg		500 W				
Total Pump Power		3500 W			Maximum available testing power	
Environmental	Transport and Storage Temperature				-40 to +85 °C	
	Transport and Storage Humidity				< 85% (non-condensing)	
Mechanical Package	60 x 12 x 6.5 mm				See Drawing	
Package Weight - Al	21g					
Order by Part Number	7004005					

Applications: Directed Energy

NOTE: Custom configurations and packages are available upon request.



Mechanical Dimensions (all units in mm)

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.



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