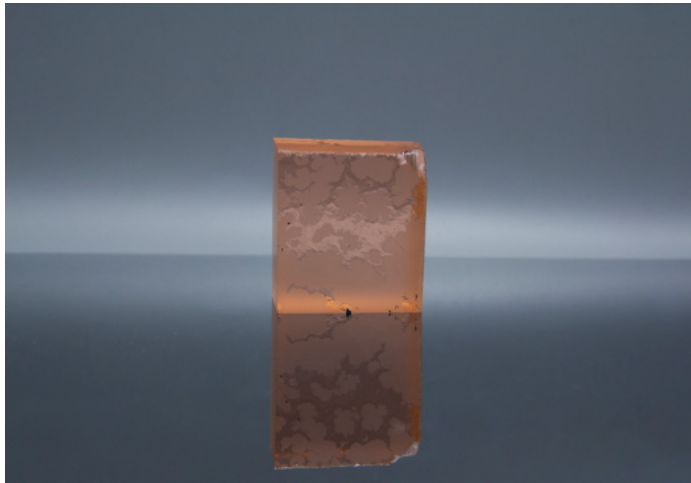


ERBIUM GLASS EYE-SAFE LASER



COMPONENTS

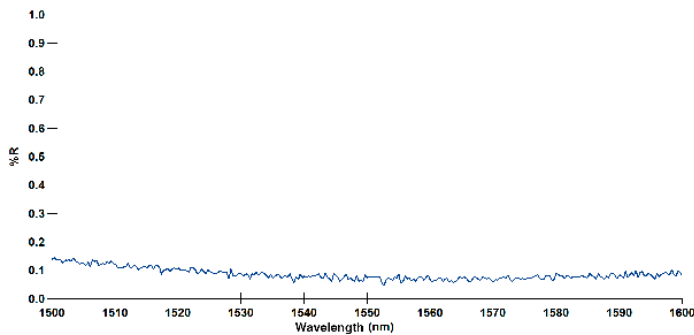
Er,Yb: Phosphate Glass



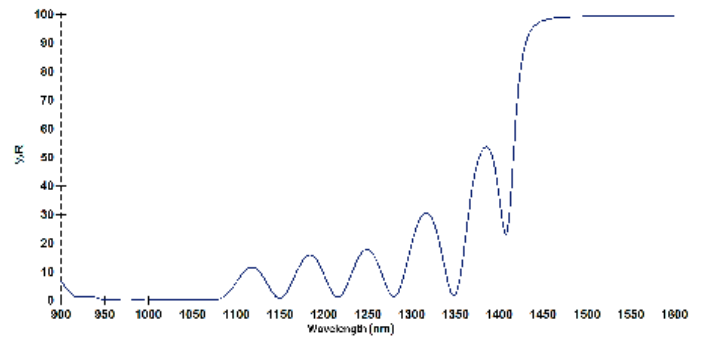
Size	Coating	Use For
1.3*1.3mm		
2*2mm	HR@1535±5nm	End-Pumped
	AR@910-980nm	
3*3mm	AR@1535±5nm	
1.1*1.1*11mm		
1.3*1.3*11mm		
1.5*1.5*11mm	HR@1535±5nm	Side-Pumped
1.1*1.1*21mm	AR@910-980nm	
	AR@1535±5nm	
1.3*1.3*21mm		
1.5*1.5*21mm		

*Customized for other size

AR Coating Test



HR Coating Test

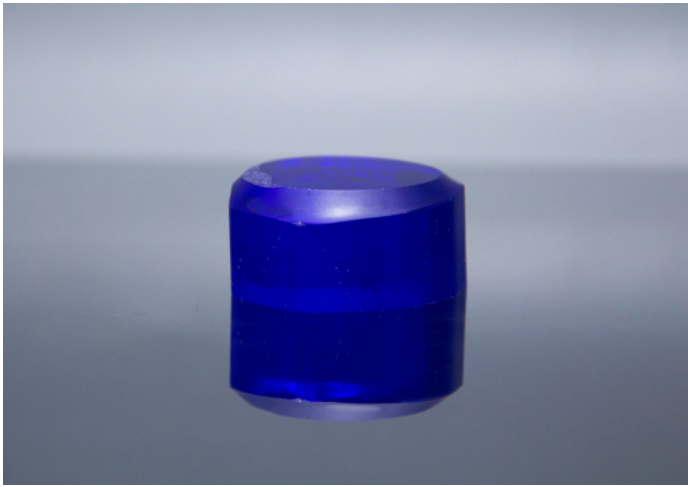


Concentration (Accept Customization)

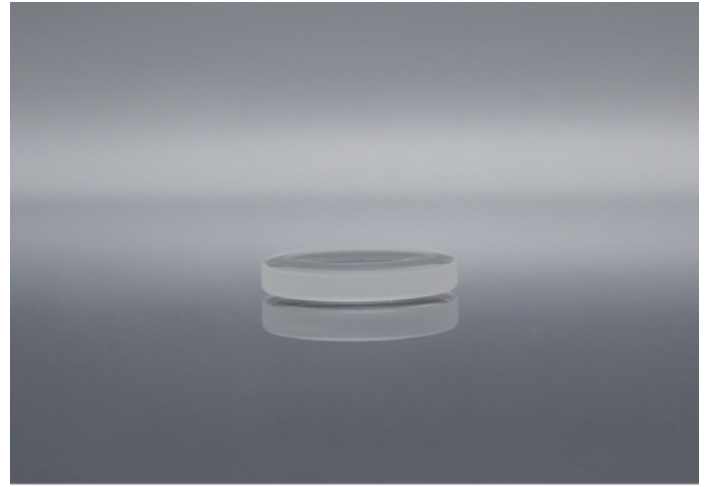
Product	Mass Percent of Er ₂ O ₃ (wt%)	Er ³⁺ Ionic Concentration(cm ⁻³)	Mass Percent of Yb ₂ O ₃ (wt%)	Yb ³⁺ Ionic Concentration(cm ⁻³)
EAT14-013	0.13	1.25*10 ¹⁹	22	2.12*10 ²¹
EAT14-026	0.26	2.6*10 ¹⁹	22	2.12*10 ²¹
EAT14-05	0.52	4.8*10 ¹⁹	22	2.12*10 ²¹
EAT14-10	1	9.6*10 ¹⁹	22	2.12*10 ²¹
EAT14-13	1.3	1.25*10 ²⁰	22	2.12*10 ²¹
EAT14-15	1.5	1.44*10 ²⁰	22	2.12*10 ²¹
WM4-E2Y2	2	1.78*10 ¹⁹	2	1.73*10 ¹⁹
WM4-E2Y4	2	1.78*10 ¹⁹	4	3.46*10 ¹⁹



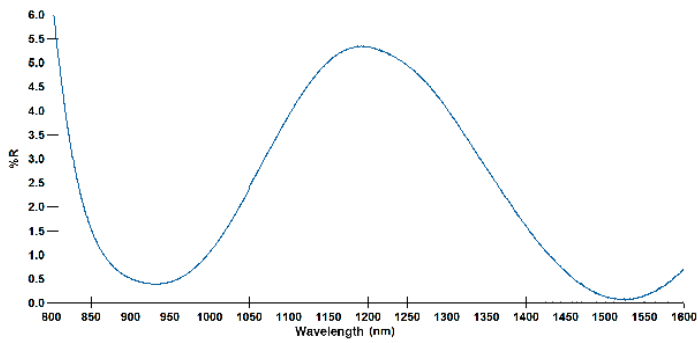
Co:Spinel



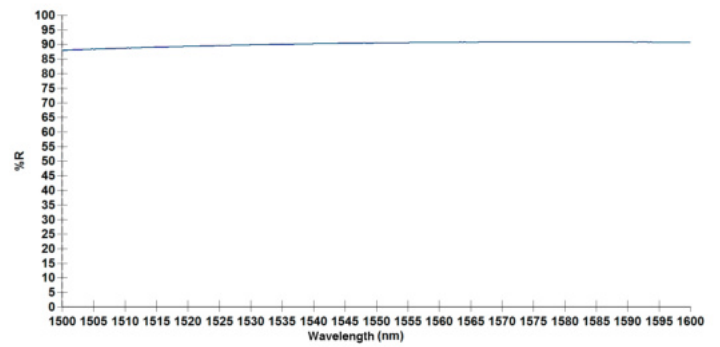
Output Coupler



AR Coating Test



PR Coating Test



Product

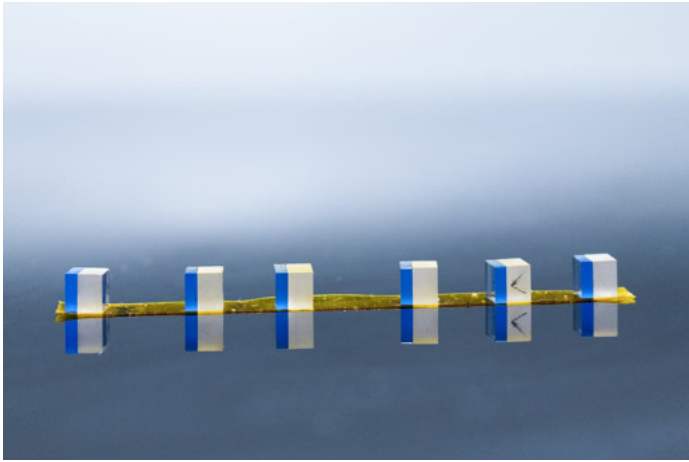
Size	Initial transmittance (%)	Coating	Use For
2*2mm			
3*3mm	85, 88,90,92, 93,95,97,98	AR/AR@1535±5nm	End-Pumped Side-Pumped
5*5mm			

*Customized for other size and initial transmittance

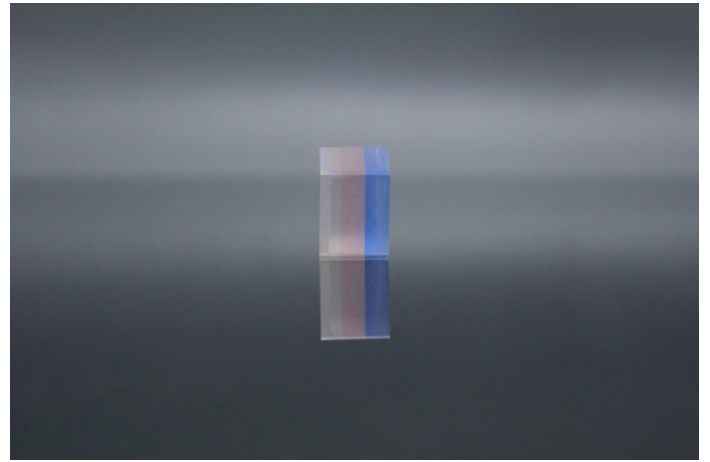


Microchip

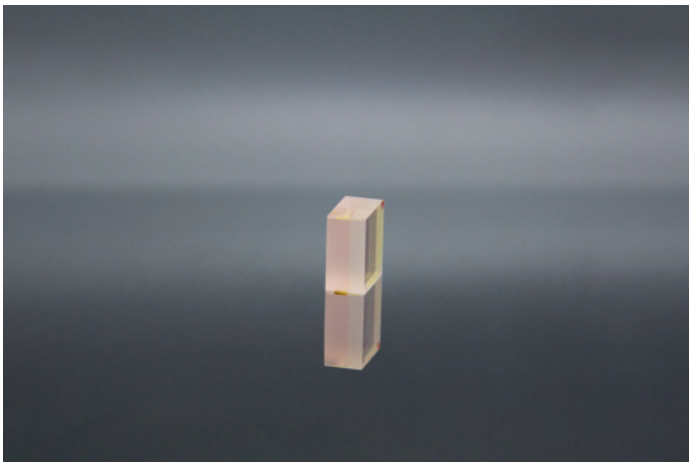
Er,Yb:Glass + Co:Spinel



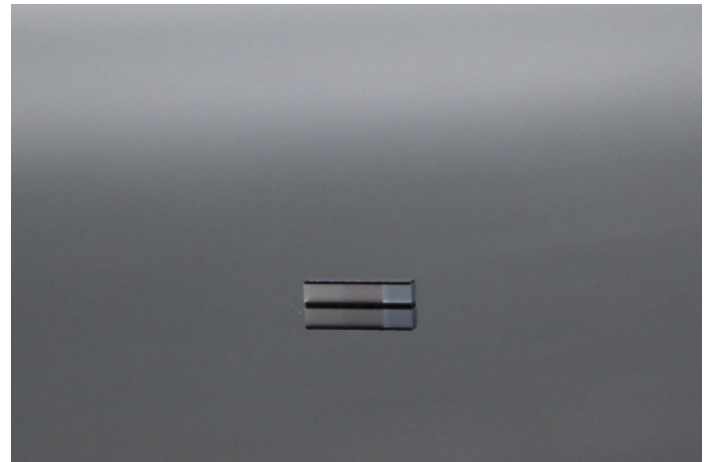
Er,Yb:Glass + Co:Spinel + Glass



Er,Yb:Glass + Glass



Microchip (With Si Heatsink)



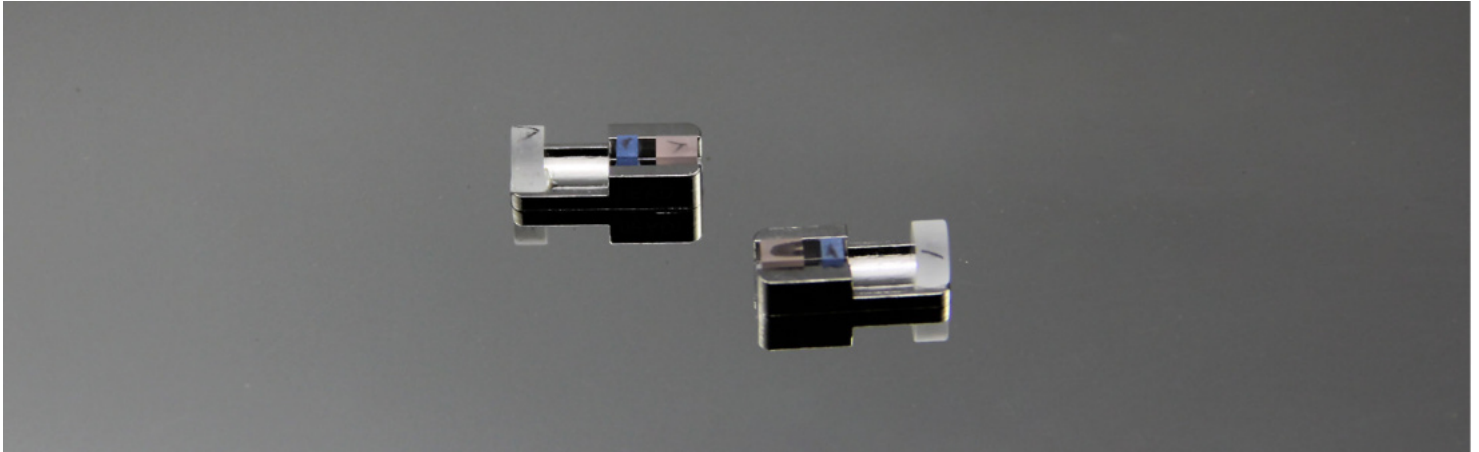
Product

Product	Coating	Application
Er,Yb:glass+Glass	S1,HR@940+AR@1535nm S2,AR@940+1535nm	End-Pumped
Er,Yb:glass+Co:spinel	S1,HR@940+AR@1535nm S2,AR@940+1535nm or PR@1535nm,T=5-15%	End-Pumped
Er,Yb:glass+Co:spinel+Glass	S1,HR@940+AR@1535nm S2,PR@1535nm,T=5-15%	End-Pumped

*Customized for other size



Laser Material Module



FEATURES

- Near Infrared, Eye Safe Band
- Easy Integrating & Shorten Developing Period
- Good Stability & Tolerance Performance
- High Energy Efficiency
- Wide Output Energy Range
- Small Divergence Angle: <12 mrad

APPLICATIONS

- Laser Ranging
- Lidar
- Diode Pumped Solid-State Laser, DPSSL

PRODUCT MODEL: CLR15-200-M4, CLR15-260-M4, CLR15-300-M4

Model	CLR15-200-M4	CLR15-260-M4	CLR15-300-M4
Wavelength (nm)	1535		
Output energy (uJ)	200	260	200
Pulse width (ns)	4.5-5.1		
Repetition Rate (Hz)	1-30		
Full divergence angle (mrad)	8.4-12		
Size of pump light (um)	200-300		
Wavelength of pump light (nm)	940		
Power of pump light (W)	8-12		
Build up time (ms)	1.7		
Working temperature (°C)	-40~65		
Storage temperature (°C)	-55~70		

*Customized for other energy range.

*Test condition: Repetition Rate-10Hz, @Room Temperature



LASER(1535nm)



FEATURES

- Based on Er: glass passive Q-switching technology
- Eye safety
- Extremely light weight
- Small package size
- Wide operating temperature range

APPLICATIONS

- Laser Ranging

PRODUCT MODEL: CL1535-40μJ-SL004, CL1535-100μJ-SL001, CL1535-200μJ-SL002, CL1535-300μJ-SL003

Model	CL1535-40μJ-SL004	CL1535-100μJ-SL001	CL1535-200μJ-SL002	CL1535-300μJ-SL003
Wavelength (nm)	1535			
Single pulse energy (μJ)	40	100	200	300
Pulse width (ns)	5	6	4.5	6
Beam divergence angle (mrad)	<12	<12	<12	<12
Repetition frequency (Hz)	1K	20	10	20
Life (Shots)	/	>2×10 ⁸	>2×10 ⁸	>2×10 ⁸
Cooling requirements	No refrigeration required			
Weight (g)	11	9.5	9.5	9.5
Size (mm)	35×8×6	28×8×6	28×8×6	28×8×6
Working temperature (°C)	-40~65	-40~65	-40~65	-40~65
Storage temperature (°C)	-50~90	-50~90	-50~90	-50~90

*Customized for other energy range.

