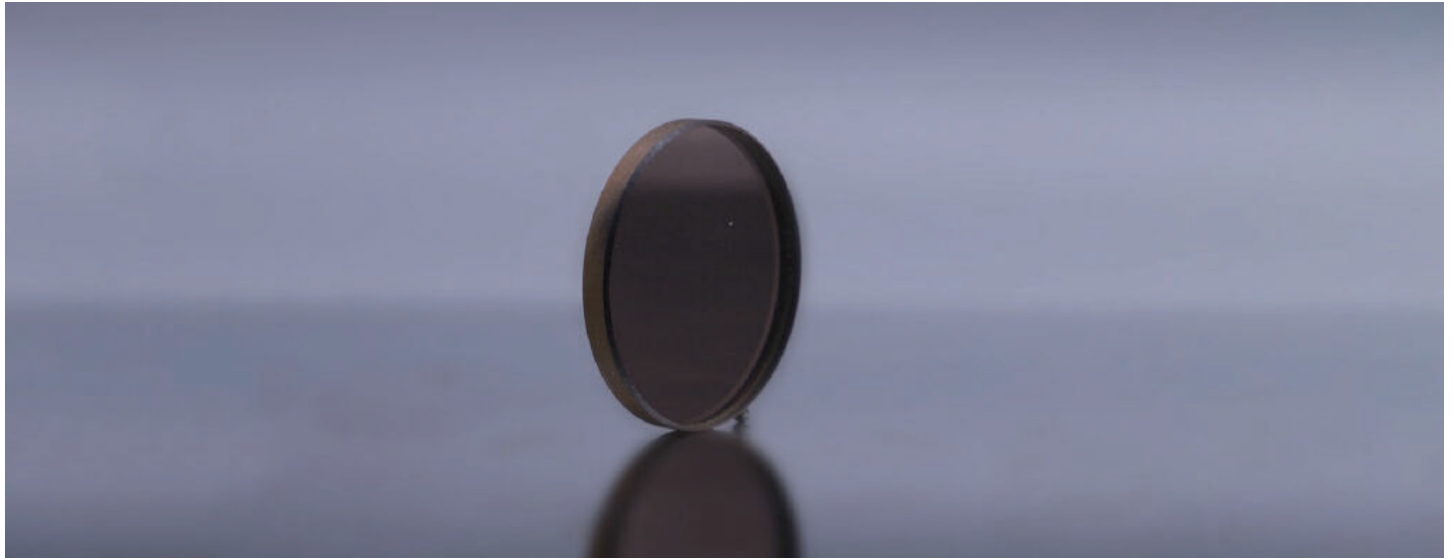


# Er:YAG Laser-2940nm-Output Mirror



## DESCRIPTION

Our output coupling mirror is used as a semi-transparent medium mirror for laser resonator, which can partially reflect laser back to the resonator for gain amplification, and partially transmit and output stabilized laser. The constant reflectivity/transmittance ratio (R/T) of the laser output coupling mirror is the main property of the partial mirror in the resonator. The pump power threshold, maximum output power and output efficiency of the laser are highly dependent on the R/T value of the output coupling mirror. Our output coupling mirrors have a reflectivity of 70%~99.5% and are made of sapphire/Neodymium-doped yttrium aluminum garnet (YAG) to transmit high power laser beams without absorbing light energy and thermal deformation. The reflectivity of the front surface is stable and the laser can be coupled well.

## PROCESSING INDEX

Parallelism	10 ″
Perpendicularity	5 ′
Surface Finish	20-10
Flatness	$\lambda / 8 @ 632 \text{ nm}$
Clear Aperture	> 85% central area
Chamfer	0.2mm-0.5mm @ 45°
Dimensional Accuracy	± 0.05mm
Thickness/Diameter Tolerance	(0,-0.1)mm
Damage Threshold	>10 J/cm <sup>2</sup> @ 1064nm 10ns 10 Hz



# Er:YAG Laser-2940nm-Output Mirror

## PRODUCT LIST-SAPPHIRE HEM RANDOM (MATERIAL OPTIONAL)

Model	Size	Form	Coating
CL-OC20005	$\varnothing = 12.7 \text{ mm } (-0.1 \text{ mm})$ $t = 3 \text{ mm } (\pm 0.1 \text{ mm})$	Front Side (S2) plane Rear Side (S1) plane	Front Side (S2) $\text{PR}(0^\circ, 2940\text{nm}) = 83(\pm 1\%)$ Rear Side (S1) $\text{AR}(0^\circ, 2940\text{nm}) < 0.25\%$
CL-OC20006	$\varnothing = 12.7 \text{ mm } (-0.1 \text{ mm})$ $t = 3 \text{ mm } (\pm 0.1 \text{ mm})$	Front Side (S2) plane Rear Side (S1) plane	Front Side (S2) $\text{PR}(0^\circ, 2940\text{nm}) = 90(\pm 1\%)$ Rear Side (S1) $\text{AR}(0^\circ, 2940\text{nm}) < 0.25\%$

## SPECTRUM

CL-OC20005, CL-OC20006

