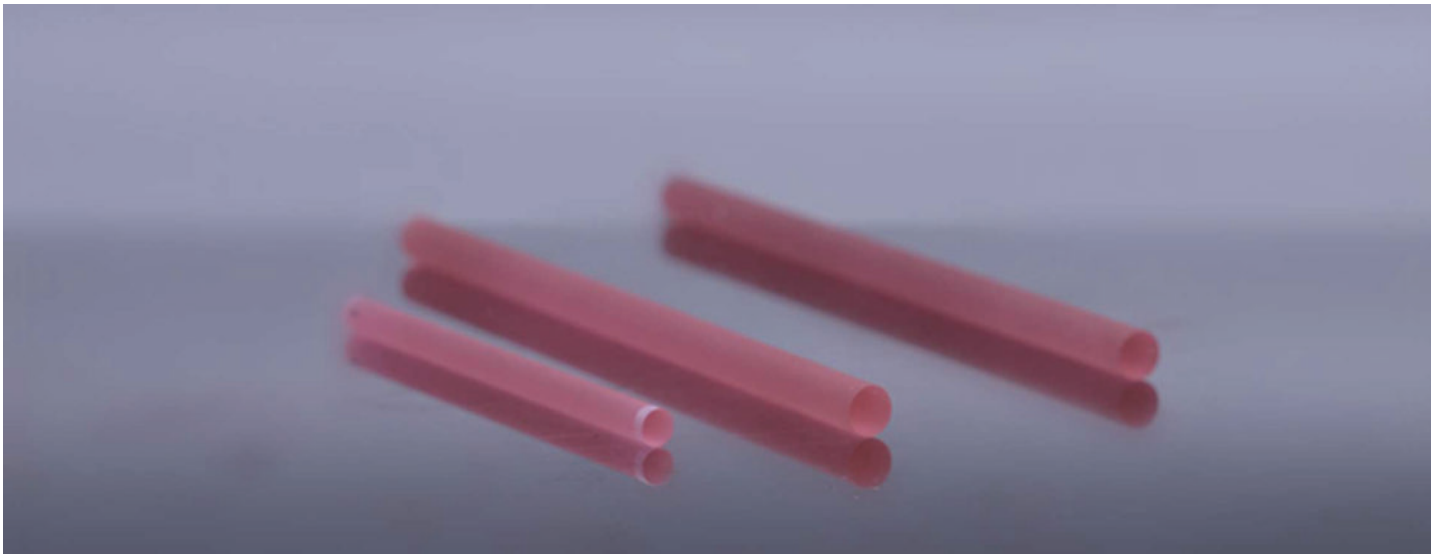


# Er:YAG Laser-2940nm-Er:YAG Rods



## DESCRIPTION

Er:YAG crystal, also known as Nd-doped YAG crystal, chemical form  $\text{Er:Y}_3\text{Al}_5\text{O}_{12}$ , is a kind of laser crystal with excellent comprehensive performance. Er:YAG crystals are widely used in plastic surgery and dentistry. Er:YAG laser crystal is 50% erbium-doped YAG, which excites 2940nm laser for medical and dental use. Combining different output wavelengths with Er:YAG, it is an excellent laser crystal with a wavelength of  $2.94\mu\text{m}$ . This wavelength is the most easily absorbed by water and hydroxyapatite of all available wavelengths and is considered a high surface cutting laser. It is a well-known material for medical applications. The emission wavelength of Er:YAG with 50% doping concentration is 2940nm, located at the position of water absorption peak, and can be strongly absorbed by water molecules. The product is characterized by high doping concentration, excellent optical quality, excellent thermal and optical properties, high output and damage threshold. It is used in glaucoma surgery, 2940nm laser penetrating keratoplasty and other fields. Currently, we are involved in projects such as the laser blood analyzer, which is coated on both sides of the Er:YAG rod and pumped at the end of the xenon lamp. Er:YAG laser wavelength is an excellent choice for improving a variety of skin conditions and aging, including hyperpigmentation, actinic photodamage, solar elasticity, acne and traumatic scarring, fine lines and mild to moderate wrinkles, rough skin texture and skin sagging.

## PROCESSING INDEX

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

## PRODUCT LIST-ER:YAG RODS

Model	CL-ROD20001
Size	dia4(-0.1 mm)*90(0,+0.5)
Form	Front Side (S2) plane Rear Side (S1) plane
Coating	Front Side (S2) AR(0°,2940nm)<0.25% Rear Side (S1) AR(0°,2940nm)<0.25%

