

Ho:YLF

Ho ions are used as active ions, the pumping wavelength is 1.9 μm , and the output wavelength is 2.05 μm linearly polarized laser, which can well pump ZGP to output 3-5 μm mid-wave infrared laser. Selecting the appropriate doping concentration and crystal size can output a higher power 2.05 μm laser, which is an important pump source laser crystal for mid-wave infrared lasers.

Main features:

Linearly polarized laser output
The thermal effect of laser operation is small
Suitable for 1.9 μm laser pumping

Material properties:

Melting point	825°C
Moh's hardness	4-5
Density	3.95g/cm ³
Thermal conductivity	0.06W/cm/K
Young's modulus	7.5×10 ¹¹ dynes cm ⁻²
Tensile strength	3.3×10 ⁸ dynes cm ⁻²
Coefficient of thermal expansion	[100] Direction: 13×10 ⁻⁶ /K
	[001] Direction: 8×10 ⁻⁶ /K

Product parameters:

Doping concentration	0~3at% can be customized according to customer requirements
Orientation	[100] or [001], deviation within 5°
Wavefront distortion	≤0.25λ/25mm @632.8nm
Crystal rod size	Diameter: 3~9.5mm, Length: 5~120mm can be customized
Dimensional tolerance	Diameter: +0.00/-0.05mm, Length: ± 0.5mm
Cylindrical processing	Grinding or Polishing
Parallelism of end faces	≤10"
Perpendicularity between end face and rod axis	≤5'
Flatness of end face	≤λ/10@632.8nm
Surface Quality	10-5 (MIL-O-13830A)
Chamfer	0.15±0.05mm
AR Coating Reflectance	≤0.25%