

## Nd:YLF

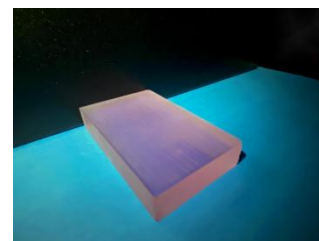
Nd:YLF crystal is very suitable for mode-locked mode to obtain short pulse laser crystals. It has the characteristics of small thermal lens effect, large fluorescent linewidth and output polarization. Nd:YLF can be used in linearly polarized resonators, mode-locked lasers, diode-pumped Nd:YLF lasers and Ti: sapphire chirped pulse amplifiers.

### Main features:

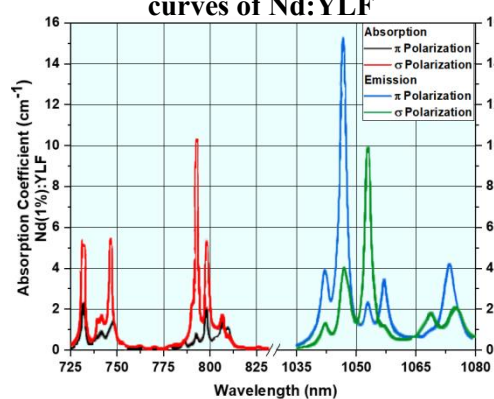
- Lower excitation light threshold for continuous laser applications
- Long life of 4F3/2 neodymium energy level
- Output polarized, high UV transparency
- Small thermal lens effect
- High power, low beam divergence, efficient single-mode output
- Ultra-large fluorescent line width

### Typical applications:

- Mode-locked lasers
- Diode Pumped Nd:YLF Lasers
- 1047 nm and 1053 nm continuous wave pulse operation
- Linearly polarized resonator Qswitching and frequency doubling
- Ultrashort pulse laser



### Absorption and emission curves of Nd:YLF



### Standard Products

Model	Diameter (mm)	Length (mm)	Doping (%)	Coating
N-K-301	3	3	5%	AR/AR@808 nm+1067 nm
N-K-302	3	5	5%	AR/AR@808 nm+1067 nm
N-K-303	3	5	3%	AR/AR@808 nm+1067 nm

### Technical Parameters

Names of Parameters	Values & Ranges
Size tolerance	+0/-0.1 mm
Clear aperture	> 90%
Finish	10/5
Flatness	$\lambda/8@633\text{nm}$
Wavefront distortion	$< \lambda/4@633\text{nm}$
Parallelism	$< 10$ arc sec
Perpendicularity	$< 5$ arc min
Doping concentration	$1.1 \pm 0.1\%$
Coating	$R < 0.15\%@1047/1053\text{nm}$
Quality warranty period	1 year (under normal use)

See appendix P35 for more information